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THE ECONOMIC JOURNAL

MARCH, 1925

THE CHANGE IN GREAT BRITAIN'S FOREIGN TRADE TERMS AFTER 1900

THE debate which has been carried on in the columns of the ECONOMIC JOURNAL and in *Economica* [1] by Mr. J. M. Keynes and Sir William Beveridge on the foreign trade of Great Britain raises questions other than those which have been touched by these scholars. I venture to suggest some considerations not mentioned by them, which bear on the interpretation of the import-export figures and bear also on the theory of international trade at large. In the notes which follow I shall confine myself to the pre-war period; during the subsequent years nothing seems deducible that bears on the particular matters to which I would draw attention.

The entire discussion is concerned with the terms of trade (to use Marshall's phrase) between one country and the series of countries with which it deals; that is, to the exchange of commodities in terms of physical quantities. It will serve to fasten attention more specifically to the problem in hand if we speak of the " barter terms of trade." And for the understanding of what follows it will be convenient to distinguish, still more specifically, between the *net* barter terms of trade and the *gross* barter terms of trade.

A word in explanation of this distinction. If a country's transactions with foreign countries—say those of Great Britain with other countries—include no items other than the imports and exports of merchandise, we have nothing to consider except the barter of the goods, and we have the simple and uncomplicated " net " barter terms of trade. If, however, a country's transactions with foreign countries are not confined to purchases and sales of goods, but extend to other matters also, we have to distinguish between these net barter terms and the less simple gross barter terms. Great Britain, for example, stands to receive

[1] ECONOMIC JOURNAL for December 1923; *Economica*, February 1924. Cp. a note by Mr. Keynes in the JOURNAL for 1912, p. 631.

annually from other countries large sums on account of interest and profits on investments abroad, and also on account of the earnings of her shipping; on the other hand, she has remittances to make on account of fresh loans made by her people—the "export of capital." These transactions, reflected in the merchandise movements, bring about between them the familiar phenomenon of the excess in money value of merchandise imports. Now, of the total British imports, a part comes in return for exports, or is paid for by the exports. A large part, however, of the imports serves to effect payment for the other items; and the excess of the money value of imports over exports represents the outcome of these other transactions. The two sets of transactions—merchandise for merchandise on the one hand, merchandise for "invisible" charges on the other—may, if you wish, be analysed as independent, or at least separate. But what in fact takes place is that each year one mass of goods comes in as imports, another mass of goods goes out as exports. These two masses—always reckoned in physical quantities—represent what I would call the gross barter terms of trade.

The figures used by Mr. Keynes and Sir William Beveridge bear only on the net barter terms of trade. They are based on Professor Bowley's well-known method,[1] and are easy of calculation. They assume that the money value of the exports is precisely equal to the money value of the imports. Assuming this, and knowing the prices of imports and exports, we can readily compute the direction and extent of the changes in the physical quantity of imports received for a given volume of exports. The method may be supposed to be familiar to the reader interested in these matters. What is important for my purpose is that the resulting figures are all based on the supposition that the money value of the exports remains in each year equal to the money value of the imports. It may be added (this suggestion is due to Professor Bowley himself) that the import and export prices would be equally serviceable for making the comparisons of changes in physical quantities if the imports and exports were, not indeed equal, but such as to bear a constant proportion to each other.

As a matter of fact, however, the imports and exports of Great Britain, and indeed of any other country, are unequal in money value; and they bear no constant proportion to each other. The imports of Great Britain throughout the period under consideration (1880–1914) greatly exceeded the exports; and, moreover, they exceeded the exports by amounts that varied widely

[1] See Economic Journal for 1897, p. 274.

and irregularly from year to year. The gross barter terms of trade are very different from the net barter terms of trade. And not only are they different; the changes that take place in the gross barter terms of trade are not so easily computed.

It is a matter of no great difficulty, however, to set up indices of changes in the gross barter terms of trade similar to the indices showing changes in the net barter terms. The following figures for Great Britain's trade in 1890, 1900, and 1910 will indicate the procedure :

	Values of Imports and Exports (million dollars).				Derived Indices.		
	Recorded Values.		Values at Prices of 1900.		Relative Physical Quantities (1900 = 100).		Relative Gross Barter Terms. (6) ÷ (5)
	Imports. (1)	Exports. (2)	Imports. (3)	Exports. (4)	Imports. (5)	Exports. (6)	(7)
1890	356	263	333	278	72·4	98·6	136
1900	460	291	460	291	100	100	100
1910	575	430	525	438	114·1	150·3	132

Columns 1 and 2 give the actual (recorded) values of the imports and exports. Columns 3 and 4 give the values of these imports and exports as they would have been at the prices of 1900. The prices being reduced to identical terms, a larger or smaller money value then indicates a larger or smaller physical volume; and Columns 3 and 4 serve to give an index of the changes in quantity of imports and quantity of exports. Columns 5 and 6 then show in what way the quantity *relations* of 1890 and 1910 compare with those of 1900. The year 1900 is taken as the base for this purpose, as it is for prices. The proportion of exports to imports in 1890 is compared to the proportion (taken as 100) of 1900. It appears that in the year 1890 much more of exports was sent out for a volume of imports than was given in the base year 1900. Working out the proportion for 1910, it appears that in 1910 also the quantity of exports exchanged for a given volume of imports was much greater than in 1900.

In other words, Column 7 gives an index of changes in the gross barter terms of trade. The figures are of the same sort as those used by Professor Bowley, Mr. Keynes, and Sir William Beveridge. They are different, however, in that they relate to the entire volume of the physical movement. They do not indicate the changes in the quantity of exports needed to buy a

FOREIGN TRADE OF THE UNITED KINGDOM, 1880–1913.

Volume and Prices of Net Imports and Exports.

Year.	*Net Imports.* (Imports less Re-Exports.)				*Exports.* (Produce and Mfcs. of United Kingdom.)				F/B.	H/D.
	Declared Value (million £).	Import Price Index 1900 = 100.	Est. Values at 1900 Prices.		Declared Value (million £).	Export Price Index 1900 = 100.	Est. Values at 1900 Prices.			
			Abs. Value (million £).	Relatives 1900 = 100.			Abs. Value (million £).	Relatives 1900 = 100.	1900 = 100.	1900 = 100.
	A	B	C	D	E	F	G	H	I	J
1880	348	135	258	56·1	223	109	204	72·3 **	124	129
1881	334	134	249	54·1	234	104	225	79·8 **	129	148
1882	348	132	264	57·4	242	104	233	82·6 **	127	144
1883	362	124	292	63·5	240	100	239	84·8 **	124	134
1884	327	120	272	59·1	233	96	242	85·8 **	125	145
1885	313	113	277	60·2	213	92	232	82·3 **	123	137
1886	294	106	277	60·2	213	87	245	86·9 **	122	144
1887	303	105	289	62·8	222	86	257	91·1 **	122	145
1888	324	107	303	65·9	234	87	269	95·4 **	123	145
1889	360	108	333	72·4	249	89	279	98·9 **	121	137
1890	356	107	333	72·4	263	95	278	98·6 **	113	136
1891	373	107	349	75·9	247	94	263	93·3 **	114	123
1892	360	103	350	76·1	227	89	254	90·1 **	116	118
1893	346	101	343	74·6	218	85	248	87·9 **	115	118
1894	350	94	372	80·9	216	84	257	91·1 **	112	113
1895	357	90	397	86·3	226	81	278	98·6 **	111	114
1896	386	92	420	91·3	240	82	292	103·5 **	112	113
1897	391	91	430	93·5	234	81	288	102·1 **	112	109
1898	410	92	446	97·0	233	81	288	102·1 **	114	105
1899	420	93	452	98·3	264 *	87	302	103·8	107	106
1900	460	100	460	100·0	291 *	100	291	100·0	100	100
1901	454	97	470	102·1	280 *	95	294	101·0	102	99
1902	463	96	484	105·3	283 *	91	312	107·2	105	102
1903	473	97	488	106·2	291 *	91	321	110·1	107	104
1904	481	97	494	107·4	301 *	92	327	112·5	105	105
1905	487	98	498	108·4	330 *	92	360	123·6	107	114
1906	523	102	513	111·6	376 *	97	387	132·9	105	119
1907	554	107	520	113·1	426 *	102	418	143·6	105	127
1908	513	102	501	108·9	377 *	98	385	132·2	104	121
1909	533	103	515	111·9	378 *	94	401	137·8	110	123
1910	575	110	525	114·1	430 *	98	438	150·3	112	132
1911	577	107	541	117·6	454 *	100	454	155·7	107	132
1912	633	109	582	126·6	487 *	102	478	164·3	107	130
1913	659	109	604	131·2	525 *	106	497	170·8	103	130

NOTES ON THE TABLE.

Data in Roman are transcribed; data in Italics are computed.

* The value of the exports of ships and boats (new) with their machinery is included in 1899 and subsequent years. The value of such exports was not recorded prior to 1899.

** For the years 1880 to 1898 these figures are computed with reference to the exports of 1900, excluding ships, etc. Since for 1900 the exports of ships and boats (new), etc. were £9·2 millions, the exports excluding these items were for this year £282 millions.

Sources: for 1900 and subsequent years the data in Roman are published annually in "British and Foreign Trade and Industry" (*e.g.*, Parliamentary Papers for 1912, Vol. 35, Cd. 6314, p. 9).

The data for the years 1880 to 1899 were obtained as follows:

Columns A and E, "British and Foreign Trade and Industry, 1854–1908," Cd. 4954, p. 19.

Column G, *ibid.*, p. 53. These figures were computed by the Board of Trade from data published annually in the *London Economist.*

Column B, for the years 1880 to 1899 the figures were derived by dividing the declared value of total imports (not net imports) by the estimated value of these total imports at 1900 prices as computed from data published annually in the *Economist* (see "British and Foreign Trade and Industry, 1854–1908," Cd. 4954, p. 53). Total imports were used because the estimated values of net imports at 1900 prices were not directly available. In applying the import price index thus obtained to the declared value of net imports (Column A) to obtain the estimated values of these net imports at 1900 prices (Column C), it is assumed that the import price index as calculated from data of total imports would not differ significantly from an import price index computed from net imports.

Column C, figures derived by use of formula $\frac{A}{B}$, $\Sigma P_t Q_t \div \frac{\Sigma P_t Q_t}{\Sigma P_o Q_t} = \Sigma P_o Q_t$, which gives the estimated values at P_o prices.

Columns D and H, calculated as indicated.

For 1900 and subsequent years figures in column B are computed by formula $\frac{A}{C}$ or $\frac{\Sigma P_t Q_t}{\Sigma P_o Q_t}$ (Paasche's formula), which is the price index.

Column F, $\frac{E}{G}$ (1880–1913).

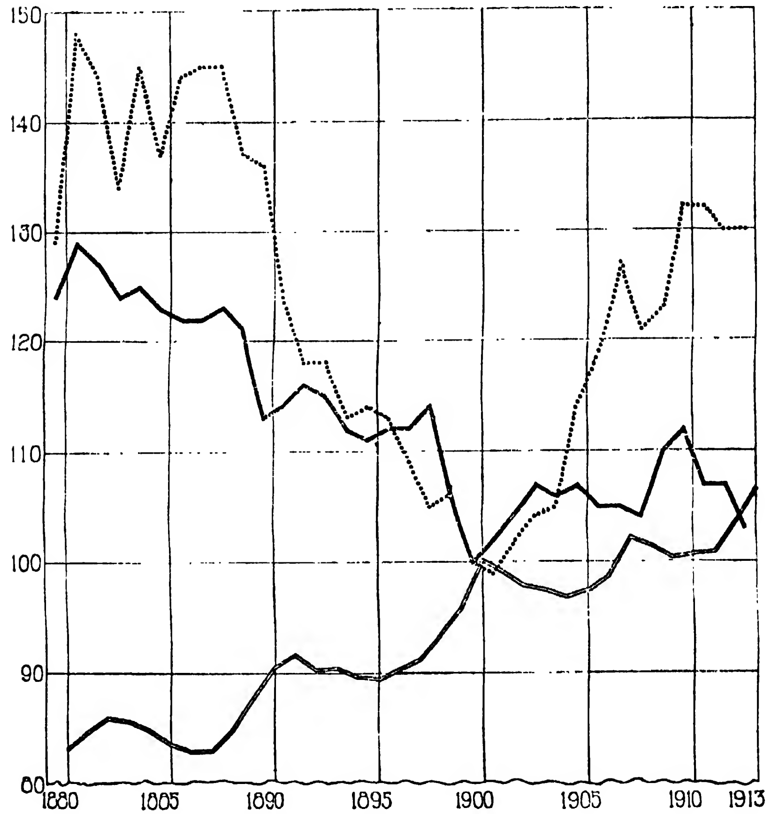
Column I gives the index of changes in the net barter terms of trade; Column J gives that of changes in the gross barter terms.

given volume of imports on the suppositions which underlie Professor Bowley's figures, namely, that the transactions comprised solely merchandise items and that the money value of exports and imports was the same (or that they maintained a constant proportion). They represent the changes in the volume of exports that actually went out in relation to the volume of imports that actually came in—the trend of the whole barter trade under the complex and shifting conditions that in fact prevailed.

I have calculated the index of the gross barter terms of trade, and will ask the reader to compare it with the index of net barter

terms. The table on p. 4, above, gives the figures in detail, and will enable the reader to check the calculations. The chart, below, shows the main relations at a glance.[1]

Let the reader's attention be given first to the upper two lines



UNITED KINGDOM, 1880—1913.

.... Ratio of quantity index of exports to quantity index of imports (Gross barter terms).

———— Ratio of price index of imports to price index of exports (Net barter terms).

- - - - Wage index, Labour Department, Board of Trade.

BASE: 1900.

of the chart. The broken line (uppermost at the beginning and at the end) shows the changes in the gross terms of trade; the solid black line those in the net terms of trade. The two lines show some similarities of movement, but also striking divergencies. Both

[1] In the preparation of the table and chart I have had the invaluable services of a former student, Mr. A. G. Silverman, now a member of the instructing staff in Economics at the Massachusetts Institute of Technology.

indicate that between 1880 and 1900 the barter terms of trade became more favourable to Great Britain; a declining quantity of exports was given for the same quantity of imports. Beginning about 1900, however, the trend of the lines is different. The gross barter terms became distinctly less favourable to Great Britain. The net barter terms, while showing also some tendency to become less favourable until 1911, revert thereafter to the same position as that of 1900. The range of fluctuation is obviously much wider for the gross terms than for the net terms.

How significant, now, are these gross barter terms? and what explanations and calculations should be borne in mind when interpreting them?

Among the "invisible" items in Britain's foreign trade (I should prefer, if usage could be changed, to speak of them as the "non-merchandise" items) the large ones are, first, income from foreign investments; second, earnings of shipping; and last, the outgoing stream of loans, or the export of capital. Of these items, the first, income from foreign investments, was stable in its trend during the period in hand. It was steadily increasing, with no marked variations from year to year; and it is a fair guess that its total amount maintained about the same proportion to the total merchandise items. The other two items were not steady. Shipping earnings fluctuated from year to year; the export of capital fluctuated still more. It is the last-mentioned that accounts more than any other for the variations from year to year in the proportion between money imports and money exports. It is this which chiefly leads to the fluctuations both in the net barter terms of trade and in the gross barter terms of trade.

Consider now what these several non-merchandise items mean in any one year as regards the effect of foreign trade on Britain's material prosperity. Shipping earnings have a different economic significance from the other two. Shipping services are strictly in the nature of exports. What Great Britain gives in any year in order to pay for her imports of that year includes not merely the recorded exports, but the freight and passenger services which she renders to other countries and which are at once paid for. If one were to construct figures showing the physical incomings of foreign trade and the physical outgoings, one should include the item of shipping services among the outgoings. And for the purposes of the computations and indices here under consideration, one would have to include, among the export prices, the prices (rates per ton-mile, say) of shipping services, just as one would

include the services themselves among the physical exports. It is conceivable that these prices (shipping rates) would show a different trend from the prices of other articles of export; and it is possible, accordingly, that there would be changes in the valuations of the imports and exports when reduced to the prices of the base year. I have no means of knowing whether the price changes for shipping services would be different from the price changes for other exports. Probably no such marked differences from the trend of other prices would appear as to invalidate the index figures, either as regards the net terms of trade or the gross terms of trade.

The export of capital is a different matter. Here is a transaction of quite a different kind, and quite different in its immediate consequences. Here Great Britain makes payments to other countries, but for the time being gets nothing whatever in return. Presumably she will get interest or profits in the future; some beginnings of a return perhaps within a year or two. But for the time being—for the current year, say—she gets nothing. Yet, for the time being, she gives something. The payments which she has to make to other countries on account of the new loans are effected through merchandise movements. The rapidity with which changes in this item (or, rather, changes in the total of the invisible items) are reflected in movements of physical merchandise is a striking phenomenon; but it is one well attested by experience. If this item (export of capital) were the only one in the foreign trade account, over and above sales and purchases of merchandise, the trade as a whole would show in money value an excess of merchandise exports. Britain's foreign trade being such as it is, with an established excess of imports, the new loans cause, not an absolute excess of exports, but a diminution in the excess of imports. So far as concerns the *changes* in the relation between imports and exports, it is not material whether there be an actual excess of exports or a diminution of the excess of imports. In either case the outgoing loans mean that for the time being Great Britain is led to export more goods than she would otherwise do. In other words, she sends out more exports than before for a given volume of imports.

The same considerations which hold good of the export of capital hold good also of the third item, the largest of all—income from foreign investments. They hold, that is, with an inverse significance. When interest and profits on foreign investments cause the money value of imports to exceed the money value of exports, and also (we may feel certain) cause a greater physical

volume of imports to come in than would come without this factor, Great Britain for the time being gets something, but gives nothing. Her outgoings took place in the past, at the time when the original investment was made—a decade or a quarter of a century before. What then did go out, in the way of merchandise exports, is done and gone. What now comes in, in the way of swelled imports, has no relation to the older movement—that is, no relation that bears on the present gain, or change of gain, from international trade. The payment of the income brings about larger imports into Great Britain than would otherwise come; because of it, she gets more imports than she would otherwise get for her volume of exports. The gross barter terms of any year are made better by the income of that year from investments, just as they are made worse by the capital export of that year.

The outstanding variable factor, to repeat, is the export of capital. It is this which explains the changes that appear in the net terms of trade and the more striking changes in the gross terms of trade. Above all, it seems to explain the change which is so marked about 1900. The gross terms of trade become distinctly less favourable to Great Britain after 1900, and very much less favourable from 1905. The change in the net barter terms is in the same direction, though not so marked. The general trends for the decade seem to reflect the extraordinary burst in the export of capital which then took place and which reached its climax two or three years before the war.

I submit that the thing which signifies, as regards the growing or lessening gain which is secured by Great Britain year by year from her foreign trade, is the trend of the gross barter terms of trade. The net terms rest on suppositions contrary to fact—that the money values of imports and exports are equal, or that they maintain constant proportions. The gross terms of trade represent what is happening; they show the drift of the changes which are actually taking place. These changes, no doubt, may not be accurately shown in the figures here given. If careful count could be taken of shipping services and earnings, of shipping and rates, and if account could be taken also of other items that represent for each year a *quid pro quo*—tourist pleasures and tourist expenditures, for example—the figures might be sensibly different. But is it not figures of *this* sort that we should try to get in order to ascertain whether the foreign trade of Great Britain tends year by year to become more or less advantageous to her?

I turn now to another aspect of the problem. Whichever set of figures is viewed, the general indication is that the terms of

trade between Great Britain and other countries tended to become more favourable to Great Britain between 1880 and 1900, and that after 1900 there was either a relaxation of the favouring tendency or a distinct reversal. The concrete way, however, in which a country secures more favourable terms in international trade is through its money incomes. More favourable terms mean rising money incomes; less favourable terms declining money incomes. Money incomes are presumably congruent in their movement with that of domestic prices. We should expect in Great Britain a tendency towards rising money incomes until 1900, and thereafter either falling money incomes or a check in the upward movement.

If the reader will glance at the chart again, he will observe the lower line, which indicates the movement of money wages in Great Britain between 1880 and 1914.[1] The movement is upward until 1900. Thereafter it shows no marked inclination one way or the other—certainly not before 1911. The inverse relation between money wages on the one hand and the barter terms of trade on the other hand is unmistakable. It gives every indication of an inverse correlation. Precisely that sort of correlation we should expect on grounds of theory.

The failure of money wages to rise in 1900–1915, and a corresponding failure of commodity wages to rise, has been recognised as a puzzling phenomenon, or at least one calling for explanation. It has been discussed by Professor Pigou, among others, in the ECONOMIC JOURNAL (1923, p. 163). May it not be explained, at least in good part, on the grounds here suggested—as the result or concomitant of a change in the conditions of international trade? The decade after 1900 was one of extraordinary economic activity, in which an upward movement of wages—both money wages and commodity wages—might have been expected. In Great Britain, however, an outstanding phase in the general upward movement was the increased export of capital. The effect of this factor, standing alone, would be to cause a lowering of money incomes and of domestic prices. Coming as it did at a time when other factors were causing a world-wide rise in prices, its effect would be to prevent money incomes (wages among them) from going up as much as they otherwise would.

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[1] The line is based on the Board of Trade figures given in the *Seventeenth Abstract of Labour Statistics*, Cd. 7733, p. 66. They give the index for all occupations, *i.e.* including agriculture.

THE FARMERS AND THE GRAIN TRADE IN THE UNITED STATES: AN INTERPRETATION OF THE PRESENT POOLING MOVEMENT[1]

Introductory.—Students of the grain trade are much impressed with the world-wide discontent over price among wheat farmers. The farmer has a feeling, amounting to a conviction, that the price is determined by the methods and the machinery of the market, rather than by any underlying conditions of supply and demand. He feels that if he could change the flow of the grain to market he could change the price. He favours so-called "orderly marketing."

In Australia, Canada and the United States to-day we see the farmers forming gigantic pools for the marketing of their wheat. In the United States alone there have been formed fifteen state-wide pools.

The purpose of this paper is to analyse and interpret this movement, so far as it applies to the United States. To give a correct picture of the present situation, however, it is necessary first to give the economic background, showing the significant changes in the consumption, the production and the distribution of wheat.

I. Consumption and Production

This background must be sketched very rapidly, in order to have space to discuss the pools.

As recently as fifty years ago the average American farmer in the wheat-producing section—and that included most of the states in the Union—took his own wheat to a small near-by mill and exchanged it for flour. These were the days of the small flour-mills, using the ancient type of mill-stones. This made a wholesome flour although not of snowy whiteness. This flour was, in turn, baked by the housewife into bread. I do not claim to be an old man, but I personally remember a certain Kansas farm home, some forty years ago, where, one morning, the mother announced to the father that the flour barrel was

[1] An address before Section F of the British Association, Toronto, Canada, August 13, 1924.

empty, and he must go to mill; the father replied that the granary was empty, the wheat was gone. That day, for the first time in the life of this household, flour was bought at a grocery store. This small incident represented the beginnings of a big evolution in the grain trade. About this time the steel roller began to displace the old-fashioned mill-stone. Soon the "Hungarian process," as it was called, spread throughout the country. The first effect was to kill off the small country mills. Larger units were more economical. Mills grinding from 1000 to 60,000 barrels of flour a day were built. This was the first phase of the evolution. When the farmers' wives began to go to grocery stores to buy flour, they soon found it was just as easy and simple to buy bread. The second phase of the evolution then was the coming of baker's bread into general use. This change in the consumption habits of the people in turn affected the production and the values of the wheats grown. The bakers, of course, made whiter bread than the home-made bread. But they soon found that the harder wheats made stronger flour, and the dough of stronger flour absorbed more water and made a bigger loaf. This, of course, added to the demand for the hard spring wheats and to the hard winter wheats. Durum wheat, however, although a hard spring wheat, and producing palatable and wholesome bread, unfortunately makes yellow flour and hence is shunned by millers. Soft wheats, once in universal demand for local consumption in home-made bread, are now at a discount.

In favour of the soft wheat consumption, however, there still remain two considerable factors—the industries manufacturing crackers ("biscuits," to use the English term) and the white people of the Southern States, who still use the American hot biscuits. However, from the standpoint of market evolution we are now in the age of bakers' snow-white bread and the large-scale flour-mill.

Grading.—The standardisation of our wheats, or, in other words, the working out of definite, scientific federal grades, was, I believe, the biggest single forward step we ever took towards better marketing. We are yet far from the goal here, however.

In the year 1908 there came to President Roosevelt a remarkable document from the Chairman of the International Committee on American Grain Certificates. This Chairman, a member of the London Corn Trade Association, submitted certain facts about faulty American grain grades used in export trade and suggested, with most delicate British courtesy, that the American

laxness was due to "errors or worse," in the grading methods of recent years.

We saw the point.

The effect of this foreign criticism, added to existing American discussion of the subject, was to hasten the passage by Congress, in the year 1916, of the Federal Grain Standards Act, giving the Department of Agriculture authority to formulate and put into effect federal grades for grains, and also providing for federal supervision of State Inspection and Grading. In other words, the states would, after this date, use only uniform federal grades for grain going into interstate and foreign commerce.

The one outstanding advance in production of wheat made in the United States in the past fifty years has been the introduction of that type of hard spring wheat known as Marquis. And that was Canada's gift to us. Thank God there are no tariff walls against ideas, as there are against commodities, or we would still be living in the intellectual Middle Ages, as we still are living, in my country, under the mercantile system of the seventeenth century. We ought to pay a tribute to Dr. Charles E. Saunders, Dominion Cerealist, Central Experimental Farm at Ottawa.

Farmers' Efforts at Marketing.—Before entering upon a discussion of the current Pooling movement, it is necessary for me to refer to two other movements in the nature of direct attempts by the farmer to market his grain. One of these movements has been a great success, one a complete failure. I refer, in the first place, to the farmers' local co-operative grain elevators, some five thousand in number, and now a success for some forty years; and in the second place, I refer to the big terminal marketing scheme, the United States Grain Growers, born in 1921, dead in 1924. This latter was a gesture by the American Farm Bureau Federation, desiring to do something in marketing on the grand scale. This hastily concocted scheme proposed to bind the farmer with a contract so that all his grain for five years should be sold through this agency. But since no adequate selling machinery was provided, the 50,000 farmers who signed the contracts disposed of their grain through the usual channels. The farmers who joined each paid a ten-dollar fee for that privilege. The managers not only dissipated the $500,000 thus collected, but $250,000 more borrowed from friendly State Farm Bureau federations.

II. Pooling

Introductory.—There is now on foot in the United States a movement to form a great national wheat pool. The plan of the promoters is ultimately to join forces with an international pool, including Canada, Argentina and Australia.

Definition.—A wheat pool may be defined as a combination of producers who entrust to paid managers, hired for that purpose, the complete and unqualified control of the storage and selling of their wheat. In actual practice the American wheat pool is either state-wide, or embraces an area covering several states. The essence of Pooling is, the small, individual competing farmer dealing direct with the single, highly centralised, powerful corporation. To this central body the farmer is bound for a long term of years, five or seven, with a legally binding contract. This is frequently but erroneously called the "California Plan" of marketing. There is little doubt in my mind that if California's most successful co-operative marketing concern, the California Fruit Growers' Exchange, should begin to pool the orange crop of the state in one big central pool, thus eliminating the functions of the two hundred powerful, vital, active local co-operative associations, it would mean the immediate downfall of this very useful association.

Economic Philosophy of Wheat Pools.—The economic philosophy of the wheat pool may be expressed in one word—control. The pooling movement, when analysed, is seen to imply control of markets, monopoly (although that hated word is never used). Pools strive for size enough to "dominate the market," and all that that implies in the way of price control, as I shall show later. In short, these agrarian pools seem to be like the old industrial pools which were so familiar in the late 70's and the 80's.

Industrial Pools.—The industrial pools were created for overcoming what was then termed the evils of competition. Prices were too low to enable all the competing plants to stay in business. The manufacturers, in turn, refused to consider the evil to be over-production, but placed the blame on the marketing system. A typical illustration of this fact is the Michigan Salt Pool, which functioned during the 70's and 80's. Mr. J. E. Shaw, President of the Michigan Salt Association (a small combination of salt manufacturers), issued a circular January 8, 1876, to all the salt manufacturers of Michigan, calling a meeting to effect an organisation. In this circular

he used language which, by a substitution of the word wheat for salt, would fit the wheat pools of to-day. He said, in part :

> " ' Organised we have prospered. Unorganised we have not.' This is the experience which we have been paying dearly for. . . . The trouble lies in the marketing of the product. Each man has taken care of (or attempted to) his own product. . . . The other salt districts of the United States are now organised, and are ready to treat with us (as soon as we have an association) relative to fixing and maintaining prices, dividing the territory, and making other arrangements, which will inure to the advantage of the trade. But we must first be organised. They cannot treat with individuals."

The Salt Pool was accordingly organised. Indeed this was the epoch of industrial pools. This pool prospered very well, for a time. But it had no power to limit production : hence new wells were sunk continually. Later a New Jersey trust was formed, displacing the pool. Still later, a holding company, the International Salt Company, was formed, followed by a period of extravagance, mismanagement and failure.

In a similar way the Whisky Trust began as a whisky pool, called the Western Export Association, to limit output and to export the surplus even at losing prices. This combination later took the trust form, to increase its strength. Then owing to scandals, speculation and mismanagement the trust took the form of a holding company, and again it underwent various reorganisations.

In a similar way the story might be recorded of various other pools, such as the Bessemer Steel Pool, Wire Nail Pool, the Gunpowder Pool, the Envelope Manufacturers' Pool, Merchants' Ore Association, Steel Rail Association, Candle Manufacturers' Association, Addyston Pipe Company, Plate Pool, and scores of others.

These pools all failed and passed out of existence. They did, in many cases, give place to a reorganisation in the form of the so-called trust. Then the period 1898–1901 is generally referred to as that of the " consolidation craze " in the United States. In John Moody's book, the *Truth About the Trusts*, published in 1904, he gives the names and capitalisations of 416 " trusts " with a total capitalisation of over twenty billions of dollars. He also includes a list of 35 " disintegrated, defunct

and inactive trusts." And in the twenty years since that date he could add most of the other 416 to the list of "disintegrated, defunct" trusts. But a few powerful ones, like the United States Steel Corporation, have survived. And in this connection it is interesting to note that the organisers of the wheat pools state and reiterate in all their speeches that they propose to do for wheat exactly what the U.S. Steel Corporation does for steel. Is it necessary for me to pause at this point and point out the utter fallacy of this argument? There are fundamental and irreconcilable differences between the farm and the factory, between the wheat pool and the steel corporation. The steel company produces steel. The pool does not produce a bushel of wheat; it is only a marketing agency. The steel company controls absolutely the quantity and quality of the steel it makes. But the individual farmers themselves who produce the wheat cannot control the quantity; the weather does that. Neither do they control the quality within any definite limits. Thus in the spring of 1916 the North Dakota farmers planted No. 1 Northern wheat, and produced "D Feed" wheat. Hot, dry weather did that, and the farmer cannot control weather. When the steel company finds a railroad desiring 130-pound steel rails, it does not produce 90-pound rails to meet this demand. It produces only a standardised article and it produces the quantity needed. So the first two fundamental and irreconcilable differences between farm and factory are these two of quantity and quality. And there is a third, namely, the elasticity in demand for the product. Agriculture is producing food for the human stomach, and this same stomach can expand a little, perhaps 10 per cent. Then it can hold no more bread and meat. But there is absolutely no limit to possible human demand for industrial products. If a man builds himself a $5000 home, is he satisfied? Not if he prospers; he will have to have a $10,000 home. A little more prosperity, and he wants a $25,000 home, or a $100,000 home, and so it goes on. Hence the farmer producing food is not in the same class with the factories producing industrial commodities. Yet how persistent is the fallacy that the wheat pool (producing no wheat) is going to copy the merchandising methods of the steel corporation (a producing organisation).

Wheat Pools: Aims.—But to come back now to our wheat pools. What is the real goal, the actual aim of the pool? The one unifying principle running through all our wheat pools is the aim to control the price of wheat. This aim is hinted by

some organisers, plainly stated by others. As evidence, a few of these leaders may be quoted :

Mr. George E. Duis, President of the North Dakota Wheat Pool, giving the principal address at the Kansas City Convention of Wheat Growers, December 4–5, 1922, said :

> " The ultimate aim of the wheat growers is to put a price tag on a bushel of wheat. When anybody says it can't be done, I don't believe that person knows what he is talking about."

Mr. W. H. Settle of Indiana, member of the Organisation Committee of the Indiana Wheat Pool, makes the following statement in the pamphlet, *Merchandise Your Wheat*, issued in 1924 by the Indiana Wheat Growers' Association :

> " Everybody sets a price on what he sells except the farmer. Why shouldn't we have a voice in naming the price on the products we sell ? Let's get control of the flow of the wheat crop through our own association and be able to merchandise it in a way that will let us have a voice in making prices. Saving a few of the handling charges would be merely saving pennies and letting the dollars go by. What we have got to do is to handle our crop so that it is worth more in comparison with what we have to buy. We want to increase the price level of wheat in comparison with the manufactured goods and living expenses."

Ex-Governor Frank O. Lowden of Illinois, Chairman of the National Wheat Growers' Advisory Committee, states in a pamphlet, *Pooling the Nation's Wheat*, published in 1924 by his Committee :

> " If we were organised we would direct our wheat as the steel industry controls the flow of its steel. We would say to our mills : ' Our wheat costs us so much ; there is not any more than is needed for consumption ; if you want to grind our wheat you must pay the price.' That is what everybody else does."

Please note here the emphasis on the " flow " of steel, rather than on the quantity and quality produced.

At the July 15, 1924, meeting of the North Dakota Wheat Pool, Secretary J. A. Scott reported that it was not the purpose of the pool to get more for members than for non-members, but

to raise the price level by virtue of controlling a majority of the wheat crop and by controlling its flow to market.

However, the chief spokesman for the present pooling movement is the thrifty young California Attorney, Aaron Sapiro. In his address, February 18, 1924, before the Indiana Wheat Marketing Conference, Indianapolis, he used these very plain words :

> "When we go into co-operative marketing activities, do we say we are simply going to try to get some little economy in the handling of wheat? No, because you and I know that we can't handle wheat as far as the physical handling is concerned any more cheaply than the big elevator companies that are now operating both in the United States and at terminal points and in the export handling of wheat.
>
> "When it comes to the economics of physical handling, they have that system perfected so that we cannot hope to excel it. Those brokers and those wheat producers who talk about co-operative marketing as though it is some divine system which is going to assist in some way in cutting down simply the handling charges of wheat, they are simply fooling themselves. There is no such thought in co-operative marketing. . . .
>
> "We don't say that the purpose of co-operative marketing is to introduce any economy in the physical handling of grain, because we think that particular point is absolutely too trifling to bother about. What are we trying to do? When we talk of co-operative marketing we say this: We are interested in raising the basic level of the price of wheat."

The slogan of the Indiana Wheat Pool is, therefore, naturally enough, "Merchandise Your Wheat." The implication is clear. Control the flow: control the price. It is not economies, but price control, which is sought. Now, in my solemn judgment, this is not co-operative marketing at all, but a mere farmers' trust, like the old industrial trust. As evidence of the correctness of my judgment here let me cite the case of the California Farmers' Raisin Growers' Trust, recently reorganised as a co-operative marketing association.

After enjoying monopoly, price control and a brief prosperity, this farmers' trust was plagued by the inevitable increase in production which their artificial price level stimulated. Experience taught them a very simple but very fundamental truth about

real co-operative marketing which they announced in their official organ, *Associated Grower* (March 1923, p. 8), in these words:

> "The future returns of the farmers can be increased either by savings in the cost of production or savings in the cost of distribution."

In the last number of this paper which has come to my desk (July 1924), a review is given of the raisin industry from January 1923 to July 1924, contrasting conditions under the newly organised, actual co-operative, and conditions eighteen months earlier under the old pseudo-co-operative, price-fixing association. The old contract had proved unsound. The industry faced the fact of over-production. At no time following the war was the association able to sell the whole crop including the carry-over. The maximum tonnage ever sold in any one year was 140,000 tons; yet the crop of 1923 was 270,000 tons, and the carry-over from 1922 was 100,000 tons. So the old association piled up liabilities of $18,000,000 and found itself at the end of its row. Thanks to good leadership, the raisin farmers are now reorganised on the basis of co-operative marketing for savings, not for profits.

Surplus Problem.—"With the flow to market controlled there is no surplus bugaboo," says the official pamphlet, *Merchandise Your Wheat*, issued by the Indiana pool, with a blessed oblivion of California's experience. The wheat plan is here outlined under which the surplus would be dumped abroad at whatever price it would bring, "without letting the foreign price determine the American price."

Methods of organising Pools.—Enough has been said to indicate the aims of the pool at price control. Now a brief statement of the methods of organising pools. This practice has now become thoroughly standardised. It is almost reduced to a formula. A big meeting is held. Evangelistic speeches are made by impassioned orators. A whirlwind "campaign" is put on, during which small squads of men in high-powered automobiles carry their selling attack to substantially every farmer in the state. This is called the "Drive" for the sign-up. A large percentage of the farmers reached thus sign the long, legally-worded contract, even without reading it, not to say understanding it. An official organ is at the same time established and issued by the central office, carrying propaganda material, based on the familiar psychology of attack, and en-

livened with anti-middleman cartoons. Challenge and defiance are hurled at all the existing agencies in the handling of grain or in issuing market news. Broomhall of Liverpool is ridiculed when he forecasts large crops. Thus the *Producer* stated (Sept. 2, 1922), " Broomhall runs riot in Estimates "; " *Producer* forecasts shortage in Europe." The Grain Exchanges are roughly handled. Much crude wit is displayed in explaining to farmers the iniquities of " poker wheat," hedging, speculation, manipulation.

Pools organised to Date.—There are, roughly speaking, four distinct wheat-pooling movements in the United States: (1) the South-west, (2) the North-west, (3) the Scattered Pools, and (4) the National Wheat Pool, aiming to consolidate the three preceding ones.

The South-west pool began in Oklahoma in a small way in 1919, and now comprises the two states of Oklahoma and Texas.

The North-west pool began in 1920, in the two states of Washington and Idaho. In 1921 it took in three additional states, Oregon, Montana and North Dakota, and changed its name to the North-west Wheat Growers. The leaders of the movement made plans to push the movement to include the twelve north-west wheat states. The drive was made in 1923, and four states were added—Minnesota, South Dakota, Nebraska and Colorado. The name of this pool is now changed to the American Wheat Growers, and a seat is obtained on the Minneapolis Chamber of Commerce.

These two pools, then, included eleven wheat-growing states.

Scattered pools, if I may use the term, were formed independently in the four states of Arizona, California, Indiana, Kansas. This brought the total number up to fifteen.

A National Wheat Pool movement was launched, according to the standard formula, at a Chicago meeting, October 8, 1923, the heavy artillery of the movement being brought into action here. This was followed by a similar meeting at Indianapolis, February 18, 1924, and soon thereafter the drive for a " 40 per cent. sign-up " in Indiana was carried on. The Indiana Farm Bureau furnished the men and the automobiles for the campaign, and the objective was easily reached. The big drive was then shifted to Kansas, and an even stronger battery of national co-operative orators (not familiar with wheat marketing) was brought into action. But since Kansas was already enjoying three large co-operative grain marketing schemes, the generals of the new campaign were forced into a peace without victory, and a compromise was reached whereby the three competing

co-operatives were induced to co-operate with one another in an amalgamated form.

Operation of Pool.—Of course the first big question to answer about the operation of the pools is—Volume of business done and Cost of operation. The volume is definitely known, although there is a little uncertainty about costs. On the 1922 wheat crop there were actually twelve state pools at work, and they handled 24,000,000 bushels of wheat. This is 2·8 per cent. of the crop. Of the 1923 crop there were ten state pools at work, and they handled 26,000,000 bushels, or 3·3 per cent. of the crop.

The bushels handled and handling costs of the 1922 wheat pools (omitting transportation) ran as follows, in cents per bushel:

Oregon	2,500,000 bushels	8·5 cents
Kansas	2,335,750 ,,	11·59 ,,
Montana	5,693,000 ,,	13·3 ,,
North Dakota	3,141,000 ,,	13·7 ,,
Okla.—Tex.	3,122,000 ,,	14·6 ,,
Nebraska	396,860 ,,	17·14 ,,
Idaho	424,000 ,,	28 ,,

Taking, for instance, the findings of our Federal Trade Commission on the buying margins of country elevators, exclusive of transportation costs (that is, the actual deduction from the terminal price received by the farmer), we have the following comparable figures of costs for the five crop years 1912–1917:

Line elevators	5·91 cents per bushel
Co-operative elevators	6·13 ,, ,,
Mill elevators	6·65 ,, ,,
Independent elevators	7·61 ,, ,,

Paying the Grower.—Pools are supposed to run one year. However, in closing the pool and making final payment to grower, sometimes a few months beyond the year elapse. It is customary to borrow money and make the grower a substantial advance, 60 or 70 per cent. of the value, early in the crop year. As the wheat is sold, additional payments are made. After twelve or fifteen months final settlement is made. The Kansas Wheat Pool of 1922 was closed in August 1923. The North Dakota 1922 Wheat Pool was nominally closed in June 1923. However, about 1,000,000 bushels of wheat (one-third of the year's receipts) came in at the end of the pool, when the price was six or eight cents lower than it had been in the fall. Consequently this wheat was held for an anticipated rise in price (*i. e.* a speculative profit), and final settlement made in August. The price change meantime was downward. In other words, the wheat held by

24293.

the pool for higher price was sold on a falling market, the decline amounting to approximately $70,000.

Success of Pools.—Does pooling pay? Yes, on a rising market. No, on a falling market. Since the market falls as often as it rises, it is evident that the speculative gain, in the long run, by holding wheat into the winter and spring amounts to nothing. For instance, the small Oklahoma pool of 1919 sold some wheat the following spring at an advance of 50 cents a bushel over harvest-time prices. But the Oklahoma and North-west pools found that the 1920 crop had fallen in value $1·00 a bushel from harvest-time till the next spring. In other words, the first speculative gain of 50 cents was offset by a speculative loss of one dollar a bushel. The 1921 crop maintained an even price in the spring compared with harvest. The 1922 crop showed a 25 cents decline; the 1923 crop showed a 10 cents decline. In other words, in the five crops, 1919–1923, market prices showed a gain one year by holding wheat till spring, an even break one year, and a loss three years.

In the case of a long decline in wheat prices following harvest, the pool sometimes finds it has overpaid its members in making the first advance to them. Thus Nebraska overpaid and undertook to collect back from farmers. Idaho had a particularly bad experience in doing this. Thus some farmers became overpaid; others underpaid. One result of this mismanagement was to throw the Idaho Association into a receivership.

The Washington and Oregon pools have voluntarily suspended, thus completing the cycle of the three pools in the North-west. The Arizona pool went into a receivership and has ceased to function.

The chief claim to success put forward by the pools is their statement that they have raised the basic level of wheat prices. This is the expression of an opinion on their part which it is likely they cannot prove. Since they handle only 2 or 3 per cent. of the United States wheat crop it seems fair to conclude that they have had no influence on the price level. In any event we have had four years of very low wheat prices, broken only recently by drought in Canada and a consequent rise in wheat prices.

Weakness of Pools.—The weaknesses of the pools have been mentioned in the matter of delays in paying farmers, high costs of operation, speculative losses through holding, and big promises which cannot be fulfilled. There remains the one fundamental economic weakness—the fallacy concerning "orderly marketing

versus dumping." Their belief in "merchandising," in "orderly marketing," is, of course, a superstition—a belief not founded on facts. The whole structure of pooling rests on the foundation of so-called "merchandising." In other words, the pooling theory is that "dumping" wheat on the market in the fall breaks the price. This causes the pooling advocates to base their price theory on the control of the flow of the grain, on "orderly marketing"—moving one-twelfth of crop to market each month. The general objection to this theory is that the production of wheat is not "orderly" but very fluctuating; the demand for wheat is not "orderly" but very fluctuating; therefore the "orderly" flow to market would not stabilise prices.

The specific answer to this theory is that the receipts of wheat at the market, daily, weekly, or monthly, when examined statistically, are seen to have very little influence on the price movement. In short, "dumping" does not break the price. Elsewhere I have published fairly elaborate charts and graphs proving this point, I think, beyond controversy. (See Boyle, *Chicago Wheat Prices for Eighty-one Crop Years*. Also, Boyle, *Chicago Wheat Receipts and Wheat Prices for Ten Crop Years; Minneapolis Wheat Prices for Thirty-nine Crop Years*. I will mail these to interested persons, upon written request.) For the forty-three crop years, 1871–1913, the average price of cash wheat at Chicago in cents per bushel was as follows by months:

July	88	Nov.	90	March	92
Aug.	90	Dec.	90	April	94
Sept.	93	Jan.	92	May	97
Oct.	90	Feb.	92	June	94

That is, the total spread for the year was nine cents—barely enough to cover carrying charges.

The Minneapolis cash prices for No. 1 Northern Wheat for the thirty-nine crop years, 1883–1921, were as follows:

Sept.	\$1·0316	Jan.	\$1·0591	May	\$1·1359
Oct.	1·0318	Feb.	1·0537	June	1·0882
Nov.	1·0242	March	1·0541	July	1·0949
Dec.	1·0303	April	1·0859	Aug.	1·0873

Testing "dumping" statistically, by taking wheat receipts and wheat prices for ten crop years on the Chicago market (July 1, 1904–June 30, 1914), we find the following fact: daily receipts have little effect on price. In these ten years there were only five days with no wheat receipts in Chicago. We may compare the five days of no receipts with the six days of heaviest receipts

(*i. e.* receipts of over 1,000,000 bushels). The influence on price of these immense fluctuations in receipts is seen to be negligible.

Five Days with no Receipts

Taking all the days when there were no receipts, and tabulating them with the preceding and following market days, we get a photograph of what took place. It is as follows :

		Receipts.			Av. Price.
1905					
	June 10 (Sat.)	June 9	2,000	bushels	105½
		10	0	,,	106½
		12	10,000	,,	106
	June 16 (Fri.)	June 15	10,000	,,	103½
		16	0	,,	105½
		17	3,000	,,	106½
	June 24 (Sat.)	June 23	2,000	,,	111½
		24	0	,,	111
		26	6,000	,,	111
1909.					
	May 15 (Sat.)	May 14	432,400	,,	137
		15	0	,,	137
		17	4,800	,,	137½
	May 27 (Fri.)	May 26	6,000	,,	143
		27	0	,,	142
		28	4,800	,,	142

Six Days with 1,000,000 *Bushel Receipts*

Taking all the days when there were over a million bushels a day of receipts, and tabulating them with the preceding and following market days, we get the following picture of what actually happened :

		Receipts.			Av. Price.
1909.					
	July 28 (Wed.)	July 27	831,600	bushels	119½
		28	1,020,100	,,	119½
		29	484,800	,,	120½
1911.					
	July 19 (Wed.)	July 18	688,300	,,	94½
		19	1,002,400	,,	94
		20	628,300	,,	94½
1913.					
	July 23 (Wed.)	July 22	550,000	,,	89½
		23	1,121,000	,,	89½
		24	537,000	,,	89½
	July 30 (Wed.)	July 29	810,000	,,	88½
		30	1,120,000	,,	88½
		31	714,000	,,	88
	Aug. 6 (Wed.)	Aug. 5	736,000	,,	88½
		6	1,442,000	,,	88
		7	610,000	,,	88
	Aug. 13 (Wed.)	Aug. 12	721,000	,,	88
		13	1,131,000	,,	88½
		14	500,000	,,	89½

The market price of wheat on the organised grain exchanges of the world is now an " orderly " price, rising in the long run and on the average barely enough between harvest and spring

to cover the actual carrying charges of storage, insurance and interest.

It is true we move one-half our wheat crop to market within ninety days of harvest. This is exactly as it should be. For wheat is a world crop, and the flow of the United States stream of wheat must be co-ordinated with the flow of wheat into export from the competing export countries, which it is, as shown in the following table:

WHEAT EXPORTS FOR FIVE CROP YEARS, 1918–19—1922–23

	July–October.		November–February.		March–June.	
	Exports.	%.	Exports.	%.	Exports.	
United States	118,032,000	54	79,239,000	36	80,544,000	36
Canada .	43,505,000	20	80,512,000	36	40,987,000	19
Argentina .	37,287,000	17	34,399,000	16	63,935,000	29
Australia .	20,600,000	9	27,644,000	12	36,218,000	16
	219,424,000	100	221,794,000	100	221,684,000	100

Thus we see that the flow into export was substantially 220,000,000 bushels each third of the year, the heavy flow of the United States giving place, first to Canada, then to Argentina and Australia. Thus the phrases "orderly marketing," "merchandising versus dumping," when applied to wheat, have no validity.

Summary.—Viewed from the long perspective of economic history of industrial pools, and viewed also from the immediate view-point of the aim and economic foundation of the grain pool, the present wheat pools cannot survive long in their present form. They will all disappear. A few will be superseded by some stronger, sounder and more economic form of business organisation. They represent, therefore, but a temporary and evanescent phase of our economic evolution. The farmers may focus attention on any other aspect of the grain trade next—such as co-operative ownership of the flour-mills, of the bake-shops, or of the steamships that carry their grain. Who knows?

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THE CANADIAN WHEAT POOLS

1. In Great Britain manufacture holds pride of place, in Canada agriculture. In both countries the co-operative movement is widespread. However, whereas in Great Britain farmers' co-operation languishes and the co-operative stores of workingmen consumers flourish, in Canada there is only one really successful co-operative store, namely, that founded at Sydney Mines, Nova Scotia, by emigrant Lancashire miners, but in each province there are manifold farmers' organisations and co-operation takes the form of commodity marketing, with supply as a side line. Inasmuch as in normal seasons Great Britain receives the bulk of her primary food-stuff from Canada, it is of cardinal importance that British consumers should realise what is happening in Canada. Distance and politics militate against intimate up-to-date knowledge. The pressure of politics in Great Britain prevents the public from studying more than one big issue at a time; and since 1918 that issue has been Europe. In Canada the farmers are in politics, and political crises disturb and obscure economic evolution. In recent months there has been much general talk of direct contact between producer and consumer. The Canadian wheat-grower is now in a position to offer this, but when the British public awakens to the meaning of it, will it be satisfied, or will it scent a Farmers' Monopoly on a continental scale?

2. During the war the normal machinery of the Canadian wheat market had to be suspended and two bodies were created, the Wheat Export Company and the Board of Grain Supervisors. The Wheat Export Company, which had grown out of the firm of K. B. Stoddart & Co., the purchasing agents of the British Government, acted on behalf of the British Government and the Allies, and was therefore primarily a consumers' board. The Board of Grain Supervisors, composed of leading members of the Winnipeg Grain Exchange and of representatives of the farmers and the Canadian Government, adjusted the internal situation and fixed a price which was reasonable from the standpoint of the farmer and the British Government. By this dual machinery the balance of the 1916 crop and the whole of the

crops of 1917 and 1918 were marketed. The outstanding fact was that there was one great buyer only, the British Government.

3. In the spring of 1919 the Allied Governments intimated that they would not take the 1919 Canadian crop. By that time the United Kingdom had dissociated itself from Italy and France, and the three countries thenceforth bought independently, but the Allies had agreed to see the 1918 harvest out of the country and this kept the war-time Wheat Board, the Wheat Export Company, in existence till July 1919, when a second Wheat Board was formed. This was the post-war Wheat Board, which marketed on behalf of Canadian producers the 1919 crop. It was a Dominion Government Board, and its operation involved the control of the internal price of flour and the subordination of the machinery of the Grain Exchange to its rulings. It was successful because it had full powers, the backing of the Grain Exchange and a very able manager, Mr. James Stewart, who during the war had acted for Stoddart & Co. and later for the Wheat Export Company. The crops of 1920, 1921, 1922 and 1923 were handled by the ordinary channels of the trade.

4. Among the ordinary channels the most important are the farmers' co-operative organisations, the United Grain Growers, with a membership in Manitoba and Alberta, and the Saskatchewan Co-operative Elevator Company. These organisations operate local and terminal elevators, they either buy outright from their members or sell on commission, and for their export business to Europe they have special subsidiary companies. But they have no hold, legal or contractual, over their members. Dismayed at the price slump of 1920, the organised farmers demanded a continuance of the Wheat Board. This being denied, they looked about them for alternatives, and the result of three years' effort was the formation of the three allied wheat pools of 1924. The stages which led up to these were briefly as follows.

In 1921 a committee of two, Mr. Stewart and Mr. Riddell of the Saskatchewan Co-operative Elevator Company, reported in favour of a voluntary pool, but the distraction of a general election followed, and in 1921 the Canadian Council of Agriculture, believing a five-year contract—the keystone of a voluntary pool—to be unattainable, harked back to the idea of a Government Board.

In 1922 the Dominion Government declared that such a Board in normal peace-time was *ultra vires*, and left it to the Provinces. Alberta and Saskatchewan promptly passed con-

current enabling legislation, but Manitoba held back owing to its provincial election. The farmers won the election and Premier Bracken promised a one-year Board, to be followed by a voluntary pool, but the Bill was defeated, and in the other two provinces no action was taken, because no manager could be found to handle the project.

In the summer of 1923 a renewed drive was made for a voluntary wheat pool in each province, Alberta leading the way. The drive took the form of securing signatures from farmers representing 50 per cent. of the wheat acreage in the province. Only Alberta obtained this in time to handle any part of the 1923 crop. Its pool opened on October 19, 1923. In August 1924 it was able to report that it had marketed 34 million bushels at an average price of \$1·03 per bushel (Fort William), 2 cents per bushel covering its expenses and reserve. Saskatchewan and Alberta reached their objective in June and July 1924 respectively. In September 1924 a central Selling Agency was opened for the three pools, with an Eastern Sales Manager at Winnipeg and a Western Sales Manager at Vancouver. Thus a minimum of half the prairie wheat crop for 1924 is being marketed by a single authority, with an aggregate membership of 85,000 farmers, and controlling 10 million acres of wheat land. As their precedent the farmers took the contract system used by the Danish Dairy Farmers and the California Fruit Growers. The contract runs to 1927, and any member breaking his contract is liable to 25 cents per bushel damages, but upon the permission of the pool a farmer may pledge his crop. The novelty consisted in applying the idea of "orderly marketing" to a commodity in world demand, with a highly elaborate marketing machinery which for price purposes is focussed on Liverpool, the great grain-broker of the world.

What does the farmer expect from the pooling system? In the first place he need no longer worry about the right time to sell his grain. During the price slump of the last three years he has been under pressure from his creditors to do this immediately after harvest; and even though, as prices were, it might not have paid him to hold, yet the general impulsion of sell quickly made the market (he contended) a buyer's market. He was at the same disadvantage as the unorganised workman bargaining for wages with starvation staring him in the face.

But he hopes to do not merely as well as he could have done had he been a big farmer with a substantial bank balance. He hopes by orderly feeding of the market to obtain a higher price

in the aggregate than any number of farmers, acting individually, could obtain. He became converted to the possibility of this by the arguments of Mr. Aaron Sapiro, the legal organiser of the California Fruit Exchanges. In the final drive an appeal was made to all parties to join in for this purpose—the business people and non-co-operating farmers as well as the former patrons of the United Grain Growers and the Saskatchewan Co-operative Elevator Company.

What will be the outcome? A number of isolated wheat pools in the U.S.A. have failed, but the Canadian pools are so big and so much is at stake that failure is hard to imagine. They have behind them the governments of the three Prairie provinces, which have made grants for organisation and collateral security; and they have obtained from the great chartered banks a line of credit for 25 million dollars at the favourable rate of 6 per cent. The reaction of this development on British consumers is a matter of high imperial moment. It should be watched and appraised not only by the Corn Trade, but also by the English and Scottish Co-operative Wholesales and the Imperial Government itself.

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THE REVISED DOCTRINE OF MARGINAL SOCIAL PRODUCT

The Economics of Welfare. By Professor A. C. PIGOU. (London: Macmillan. 1924. Pp. 78.)

THE revision to which our title refers is that which has been undergone by some portions of Professor Pigou's *Wealth and Welfare* through restatement in the first and second editions of his *Economics of Welfare.* The reviewer of the first edition (1920), Professor Cannan, complained that under a new title there was included much that had already appeared in an earlier volume entitled *Wealth and Welfare.* A reviewer of the second edition (1924) might complain that under the same title there is not included much that appeared in the first edition. The old Part VI dealing with "The Variability of the National Dividend," and a great part of the old Part IV dealing with "Public Finance," have been omitted; the former because it is about to be published, the latter because it has already been published, under another title. One important chapter has been rewritten; and there are other changes. Such constant rearrangement of a treatise is disconcerting to the constant reader. The continual change in the order of topics breaks the links of memory, tangles the chains of reasoning, and is fatal to artistic form. The shifting of pages and paragraphs acts like the scattering of the leaves on which the oracles of the Virgilian Sibyl were inscribed. The disorder repelled those who came seeking inspired counsel:

"Inconsulti abeunt, sedemque odere Sibyllæ."

The said three versions are now to be collated in order to interpret and examine a doctrine concerning State Intervention which involves the conception termed in the first version "marginal supply price." We shall approach the subject by way of the neighbouring topic termed by Marshall "external economies"; and we shall follow Professor Pigou in approaching that topic. It is thus perspicuously presented in his latest version: "In economic text-books it is generally assumed that an aggregated supply schedule is always made up by the simple addition of a number of independent supply schedules belonging to the separate sources. It is evident that, if and when this assumption is justified, the supply schedule of

every source of supply can be represented by a plane curve, and the supply schedule of the market by a further curve obtained by the simple compounding of the curves representing the several sources."[1] As we understand, the amount supplied by the r^{th} source (individual or firm), say x_r, is a *function* of the price, say y; say $x_r = f_r(y)$. The aggregate supply, say $x, = \Sigma x_r = \Sigma f_r(y) =$, say, $f(y)$.

But, continues Professor Pigou, " when the aggregated supply of a market is separated into a number of component sources, which are not independent in the sense contemplated above, the supply curve of the market can still be represented by a plane curve, but the supply schedules of the separate sources that make up the market cannot be so represented and cannot be simply added together to constitute the aggregate supply schedule." To meet this difficulty he proposes to regard the price as made up of two parts; as thus (in our notation):

$$y = \phi(x_r) + \psi(x).*$$

" This formula," adds Professor Pigou, is readily translated into the language of diagrams." We have not found the translation so easy. Even with the help of the author's explanations, too long to quote here, we do not see how to connect the aggregate supply curve with the supply curves of the separate sources without, as in the simpler case, considering the offer of each source as a function of the price ruling in the market. Only the function now involves a constant, which depends on and, we may say without loss of generality, *is* the scale of production --the aggregate product. If x' is that aggregate under given circumstances, then

$$x_r = f_r(y,x');$$

where, as before, y is the independent variable, price; x_r is the offer of the individual or firm at that price. We have then for the aggregate supply

$$x = \Sigma x_r = \Sigma f_r(y,x').$$

That is the supply curve for a given aggregate production x' —the short-period supply curve, or, as it has been called without reference to time, the " successive cost curve."[2]

[1] *Economics of Welfare*, 2nd ed., Appendix III, p. 743. In transcribing this passage we have taken the liberty of suppressing the word "demand," which occurs in the original *pari passu* with " supply," as not being relevant to our present context.

* y is here substituted for p in the original, and x_r for y_r, to preserve consistency with our context.

[2] Cunynghame, ECONOMIC JOURNAL, Vol. II (1892), p. 41.

Now substitute x (variable) for x' (constant) in the last written equation and we have the long-period, or normal, supply curve. For example, in Figure 1 the short-period curve for aggregate product OC, the abscissa of the point R, is a line through R inclined at an angle of 45° to the horizontal, designated by the equation

$$y - (1\tfrac{1}{26} - \tfrac{2}{117}x'^2) = x - x'.*$$

To avoid overcrowding the line is not drawn in Figure 1; but

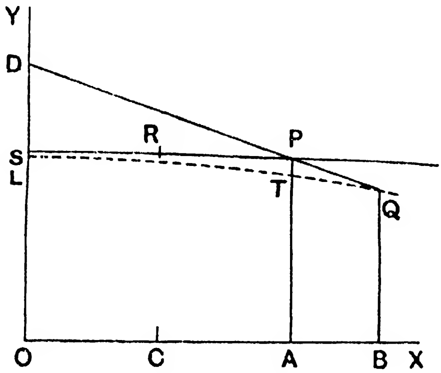

FIGURE 1.

the corresponding line may be seen at the point r in Figure 2. Now put $x' = x$; and we are presented with the long-period supply curve, the parabola SRP with equation

$$y = 1\tfrac{1}{26} - \tfrac{2}{117}x^2.\dagger$$

It appears to us important to facilitate by some such construction the clear conception of the relations between the long-period and the short-period supply curve; considering that the action of increasing returns in a competitive *régime* has proved a stumbling-block even to expert economists. It is justly considered by Mr. Keynes that "this is the quarter in which the Marshall analysis

* The short-period curve need not have the same shape at all points of the long-period curve. For we have at our disposal any number of constants formed by arbitrary functions of x' the total product. For instance let it be required that the short-period curve which is a straight line at R ($x' = \frac{3}{4}$) should become at some distance from that point a parabola. We have only to add to the right side of the equation in the text an expression of the form $\phi(x')(x - x')^2$; and to take ϕ such that $\phi(\frac{3}{4}) = 0$, and $\phi(x')$ is positive, *e.g.* $= c(x' - \frac{3}{4})^2$. It is understood, of course, that a short-period curve is supposed to hold good only in the neighbourhood of the corresponding point on the long-period curve.

† For fuller explanations see the present writer's article on the Theory of Railway Rates, ECONOMIC JOURNAL, 1913, p. 210 *et seq.*, and also his review of Cunynghame's *Geometrical Economics* in the ECONOMIC JOURNAL, 1905.

is least complete and satisfactory, and where there remains most to do." [1]

Of course our clear conception will not avail unless it corresponds to a real phenomenon. As Aristotle sagely observes, before investigating the nature of a thing, we should know that the thing exists. Now the εἰ ἔστι is called in question by Professor Alleyn Young, when he writes: "Diminishing aggregate expenses per unit of product as production increases must be rare, if not altogether lacking, in competitive industry, unless an increase in the size of the representative establishment be taken into account as a natural concomitant of increased production." [2] Fortunately

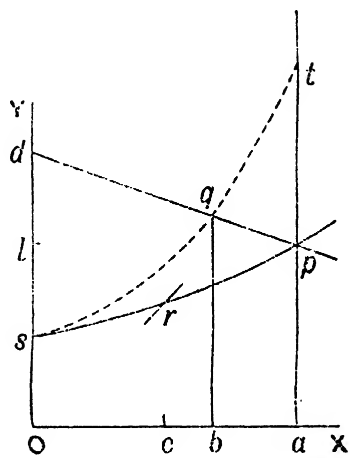

FIGURE 2.

in this matter we enjoy the proverbial advantages of "four eyes"; considerations which one critic may have overlooked another discerns clearly. "External economies we know," says well Mr. Robertson, "transport developments, the telephone and the trade journal, the shop of the club and the market price, subsidiary industries, a skilled labour supply . . ." [3]

But, granting the existence of increasing returns, Mr. Robertson finds difficulties in applying Professor Pigou's analysis to this class of industry. One of the pebbles which fly from his formidable "sling" [4] is directed against the case in which "the process of investment of fixed capital is lumpy and dis-

[1] ECONOMIC JOURNAL, Vol. XXXIV (1924), p. 351.
[2] *Quarterly Journal of Economics*, August 1913, p. 678.
[3] ECONOMIC JOURNAL, Vol. XXXIV (1924), p. 26.
[4] *Loc. cit.*, p. 16 *et seq.*

continuous."[1] Not having ourselves applied the analysis to that case in the version of the theory which we have offered in a former number of the ECONOMIC JOURNAL, we are content to repeat that even in the case of one factor of production as compared with another varying *per saltum*, there is some theoretical advantage with a view to the problems which are before us in recognising that the price of the product is theoretically not much affected by the circumstance that the agents are or are not varied continuously.[2] Some objections directed by Mr. Robertson against other species of increasing returns will be considered later.

The curve SRP being defined as above, if from any point on the curve, P, we let fall perpendiculars to the axes PA and PL (the latter not drawn in the Figure), the rectangle $OLPA$ will measure the total cost of producing the output OA. Now draw another curve STQ such that, with reference to any assigned output OA, the area $OSTA$ = the area of the rectangle $OLPA$.[3] There is thus constructed the curve of so-called "marginal supply prices."

An analogous construction is available in the case of decreasing returns; provided that the analogous phenomenon of external "diseconomies" is present. Mr. Robertson, indeed, in his graceful manner denies that any such phenomenon exists.[4] But[5] the payment for raw material imported from a foreign country, if it becomes more costly with the increase of the quantity produced for exportation, is a cost within the meaning of our theory. The land, indeed, of the home country cannot be treated as an imported raw material. But it will be convenient to postpone the difficulty thus raised by provisionally entertaining a fanciful supposition such as the following. Suppose that the Free State of Ireland had become free before the Gladstonian land legislation, and in virtue of a treaty according to which the landlords (alike of agricultural and urban land) were to retain in full their existing rights, even though they

[1] The species of increasing returns distinguished by the present writer as *third* in the ECONOMIC JOURNAL, Vol. XXI (1911), p. 554.

[2] ECONOMIC JOURNAL, Vol. XXIII (1913), p. 210.

[3] Let η be the ordinate of this curve. Then

$$\int_0^x \eta dx = x\left(\tfrac{1}{20} - \tfrac{2}{117}x^2\right)$$

$$\eta = \frac{d}{dx}\left(\tfrac{1}{20}x - \tfrac{2}{117}x^3\right) = \tfrac{1}{20} - \tfrac{6}{117}x^2;$$ less than y, except at S, the point common to the curves.

[4] *Loc. cit.*, p. 27.

[5] As pointed out by Professor Pigou, *Economics of Welfare*, 2nd ed., p. 195.

should become absentees. Suppose, further, that the landlords, disliking the new *régime*, emigrate *en masse*. In such a country the increase of the total production would act as an external "diseconomy," sending up the rate of rent to the disadvantage of the community as a whole; the absentees not being reckoned as part of the community. In such a case corresponding to the normal supply curve *srp* in Figure 2, there will be a curve of "marginal supply price" *sqt* constructed on the same principle as *STQ* in Figure 1.

What now is the use of this new apparatus? To obtain a monetary measure, more accurate than the usual one, of the aggregate real cost—disutility or loss of satisfaction—which is to be subtracted from the sum-total of utility, the aggregate satisfaction, so as to obtain a measure, more accurate than the usual one, of that portion of the national income which results from the production and consumption of an assigned output. For this purpose we require a monetary measure of total utility. It is afforded by the ordinary demand curve on the supposition that the demands of individuals are *independent*, as we at first supposed their supplies to be; not interdependent in such wise that the demand of each for any commodity is increased (or diminished) by an increase in its general use.[1] In such a case, as acutely objected by Professor Cannan,[2] there is some difficulty in applying the principle of Consumers' Surplus. Especially is there difficulty in comparing amounts of satisfaction at different times, as Professor Pigou has pointed out.[3] We shall, however, assume with him that useful broad results may be obtained by the use of the simpler construction,[4] and will content ourselves with the ordinary demand curve. The line *DP* (identical with *dp*), is used in the Figures to represent such a demand curve.[5] Thus in Figure 1 the area *ODPA* represents the total utility pertaining to the consumption *OA*; *ODQB* that pertaining to the consumption *OB*. The surplus then, the net contribution to national income, will be a maximum when the output is *OB*, the abscissa of the point *Q* at which the demand curve *DPQ* meets the curve of aggregate cost *STQ*. The like is true of Figure 2. The maximum contribution to income will be obtained from the two industries when the output for one is *OB* and for the other *Ob*.

[1] Cp. Cunynghame, ECONOMIC JOURNAL, Vol. II (1892), p. 35; and the comments thereon, Vol. XV (1905), p. 34.

[2] *Economica*, 1924.

[3] *Economics of Welfare*, 2nd ed., p. 51.

[4] *Wealth and Welfare*, p. 205.

[5] Tho equation of the "curvo" is $Y = \frac{1}{2}(\frac{3}{2} - x)$.

That is, abstracting *inter alia* the complexities which may be caused by correlation in the way of production or consumption between the commodities. If the resources available do not suffice to produce both OB and Ob', then the best distribution of resources will be that in which the marginal contribution in each industry is the same. That is, if Y is the ordinate of the demand curve and η that of the curve of marginal supply prices, the outputs, say OB' and ob', in the respective industries, must be such that $Y - \eta$ for OB' in one industry may be equal to the $Y - \eta$ for Ob' in the other industry.

Such is the import of the theory presented in *Wealth and Welfare*, as somewhat hypothetically interpreted and very freely re-stated. The re-statement presented in the Professor's new version does not seem to us an unmixed improvement, so far as it dispenses with diagrammatic illustration. It has become easier for the cursory reader to obtain general impressions, but more difficult for the serious student to obtain clear conceptions. There is an ambiguity in the verbal statement which the study of the relevant diagrams is calculated to dispel.[1] When marginal private and marginal social products do not coincide there seems to us some obscurity in the enunciation of the leading principle that (with reservations not questioned here) "the arrangement of resources which makes the values of the marginal social net products equal in all uses" will maximise the national dividend.[2] The verbal statement is no doubt much improved by the substitution of "marginal social" net product in many arguments where "marginal" net product only (elliptically, as we interpret) was

[1] See in particular *Wealth and Welfare*, pp. 192, 206. *Economics of Welfare*, 1st ed., p. 935; and cp. above, Figures 1 and 2.

[2] *Economics of Welfare*, 2nd ed., Part II, ch. iii, and corresponding passage in the contents, *et passim*.

The marginal social net product of any volume of resources in any occupation being defined as "the money measure of the purchaser's desire for the difference made by the marginal increment of those resources so employed to the sum total of economic welfare" (*Economics of Welfare*, 2nd ed., p. 120); and that sum-total being understood as total utility *not less by the cost* (*e. g.* the area $ODPA$ or $ODQB$, *not* SPD nor SQD in our Figure 1, and likewise for our Figure 2), as seems to follow from the affinity and frequent coincidence between the marginal direct physical addition made to output and the marginal social net product (*loc. cit.*, p. 119 and context); then the equality of marginal net products will *not* maximise the national dividend; unless indeed there is supposed to be a perfect similarity between the conditions of different industries. But the most important applications of the theory require that there should be a marked difference between at least two classes of industry (such as those illustrated by our Figures 1 and 2). If, however, the "sum-total of economic welfare" is interpreted as total utility *less by cost*, consumers' *surplus* (corresponding to our areas SQD and sqd), then, indeed, the principle in question holds good; becoming identical with that which we have employed in the text above.

employed in the first version of the theory. The disuse of the term "marginal supply price" is also in our judgment an improvement.

The great merit of suggesting that improvement belongs to Professor Allcyn Young. His appropriate nomenclature, "curve of aggregate expenses," avoids the misleading associations of the term "supply price." Yet he seems not to have escaped the influence of such associations when he describes the outcome of the new principle in terms that would be appropriate to the principle of *laissez faire.* "This means that in competitive industries of diminishing returns investment tends to be pushed too far, and in industries of increasing returns not far enough to secure that equality of marginal net products which makes the national dividend a maximum."[1] There is nothing in the context to show that "private" net products are not here intended. But if so, what do we more than the apostles of *laissez faire*, than Cobden and Bastiat, and even the mathematical economists who have not recognised Marshall's principle of "external economies"? We cannot indeed deny that the critic's paraphrase derives countenance from the author's wording. But we stand not by the letter of our author's argument, but by our own variant thereof, and by his conclusion, which is decidedly distinct from *laissez faire;* more decidedly perhaps in the latest version than before, *e. g.* "Benefit *may* also be secured by a *permanent* bounty so arranged as to force the industrial system from the summit of the hill-top on which it is found to any position that overtops its present site on the slope of a higher hill."[2]

What now is the worth of such a theory? An important use is indicated by Professor Pigou when he says that by means of it "we are put in a position to detect and expose sophistical dogmatism."[3] There are those who think with Leslie Stephen that this is the principal function of Political Economy. "It has been more efficient in dispersing sophistries than in constructing permanent theories."[4] There is one kind of sophistry, more common now than in Stephen's time, with which the mathematical method is particularly competent to deal, namely, bad mathematical reasoning. This use of mathematical economics is like that which was attributed to metaphysics by a very wise

[1] *Loc. cit.*, p. 680.

[2] *Economics of Welfare*, 2nd ed., pp. 125 and 128. Compare as to the significance of the metaphor, ECONOMIC JOURNAL, Vol. XXIII (1913), pp. 215-216. and Vol. XXXII (1922), p. 435.

[3] *Loc cit.*, p. 199.

[4] *Life of Fawcett*, p. 149.

man, Jowett. Some study of metaphysics, he used to say, is necessary in order to get rid of the bad metaphysics latent in popular prejudices.

But apart from these negative results we are disposed to agree with our author in hoping that the analysis, though very difficult to apply to practical problems, is not therefore otiose.[1] We allow weight, however, to the considerations urged by Mr. Robertson against the usefulness of the theory. His objections, as understood by us, may be summed up as follows. (*a*) The object contemplated, the relation between large-scale production and diminution of marginal cost, is in the future; (*b*) we cannot, therefore, be certain that the reduction is not due to some cause other than mere magnitude of production, in particular inventions; (*c*) to attempt to forecast the distant future is to voyage "pennis non homini datis."

With regard to the first point (*a*) we are disposed to agree that the action of external economies must be treated as a future phenomenon. We recognise, however, that the contrary view is held strongly by Sir Henry Cunynghame[2] and has been at least entertained by Professor Pigou.[3] We attach importance to the intuitions of path-breakers. Secondly (*b*), we are satisfied with Professor Pigou's admission, that in practice to draw a hard line between inventions that are and inventions that are not a result of changes in the scale of production is not generally practicable.[4] In fine, (*c*) it is, of course, not given to man to forecast the distant future accurately. Yet it was permitted to Marshall, without general disapprobation, to prove propositions *in eodem genere* as those now in question, relating to a problematical future. The object contemplated by Professor Pigou is not more distant in the future. He envisages the same object, but more clearly, account being taken of Producers' (as well as Consumers') Surplus. The abstract reasoning, it is suggested, may one day be made available by means of relevant statistics. Meanwhile conjecture about remote consequences, which sometimes cannot be avoided where action has to be taken in the present, may be assisted by propositions of the kind in question. They are curious and may be useful.

[1] *Loc. cit.*, p. 200.

[2] With respect to Demand at least, which is treated as parallel to Supply, ECONOMIC JOURNAL, Vol. II (1891), p. 39; questioned by the present writer, Vol. XV (1905).

[3] *Economics of Welfare*, 1st ed., p. 941. But see ECONOMIC JOURNAL, Vol. XIV (1902), p. 388, and context; commented on by the present writer, Vol. XVII (1907), p. 225.

[4] *Economics of Welfare*, 2nd ed., p. 193.

So far the theory as re-stated by us in 1913 appears to hold good; little improved by revision or damaged by criticism. But so far we have abstracted the receipt of rent by members of the community. Now let our absentee landlords return and be treated as citizens; or let their rents be appropriated by the Government. In such a case it is an error to treat the rents paid as a cost in the sense with which we are here concerned; an error acutely pointed out both by Professor Alleyn Young [1] and Professor Maurice Clark,[2] and candidly acknowledged by Professor Pigou. It is remarkable that Professor Pigou should have committed this oversight, seeing that an analogous fallacy was pointed out by him—for the first time, we believe—in a former work where he observes: "To pay a man, whether he be a Member of Parliament or a workman, much more than his services are worth, that, undesirable though it is, does not directly involve any waste of national resources. It is merely a transference of resources to one set of people in the country at the expense of another set."[3] The truth might have been suggested by the classic formula, "Rent does not enter into the cost of production," as accepted by Marshall. It should be remarked that the main outcome of the theory, the blow given to the abstract doctine of *laissez faire*, is not much affected by this correction. The reasoning holds good in the limiting case when in our Figure 2 the curve *sqt* is coincident with *srp*. But we do not seek to extenuate an error into which we ourselves have fallen. We only hope that it is not unpardonable to have erred with and through Professor Pigou.

F. Y. EDGEWORTH

[1] *Quarterly Journal of Economics*, August 1913.

[2] *Economic Review*, September 1913.

[3] *Economy and Finance of the War* (1916), p. 21. Cp. *Political Economy of War*, p. 51.

A PLAN FOR STABILISING PRICES[1]

THE great volume of international debts payable in gold, and the serious difficulties which would in consequence be produced by any great enhancement in the value of gold, furnish a strong argument against the restoration of gold as a medium and basis of currency. If the gold standard is to be abandoned, it is generally agreed that a system of currency should be adopted which would minimise or altogether prevent the large fluctuations in the general price level that have always proved so disturbing to commerce and to the psychology of the people.

Several monetary systems have been devised with the object of maintaining the constancy of the index-number of prices, all of which are theoretically sound, and which differ chiefly in their expediency and practicability. These systems may be divided into three classes.

Inconvertible Currency subject to Voluntary Control.—Numerous economists have suggested plans whereby money would consist of paper currency representing no express obligation on the part of the Government, but with a value dependent upon the amount of currency in circulation, upon the condition of credits, and upon the general state of business. By voluntarily increasing or diminishing the amount of currency in circulation, or by producing an expansion or contraction of credit, the Government, by careful supervision, could completely determine the value of its money. If it so chose, it could so regulate the currency that average prices as shown by the index-number would remain stationary.

The sole objection to this proposal is that the whole matter is left to the skill and good-will of the Government. Experience has shown that very few Governments can resist the temptation to ease their own financial difficulties at times by an inflation of currency or credit, and this would be especially true if the act of inflation did not constitute a definite admission of bankruptcy, but could only be detected by a gradual rise in the level of prices. I am aware that many eminent economists are recommending the very plan for stabilising money that I am here criticising. I

[1] An outline of this plan appeared in print through the accident of a conversation with Professor Irving Fisher, who later in his *Stabilising the Dollar* devoted a section to an explanation of my plan, which he was kind enough to describe as "a sound alternative" to his own proposals.

should be glad to share that confidence in Governments which their plans imply. However, I find that they are not always disposed to give unqualified praise to present Governments or past Governments, nor do they conceal their distrust of the professional politician. In a future Government it might be possible to erect a department for the control of credits composed solely of trained economists, but I fear that after the lapse of some years it might be hard to distinguish some of these men from the professional politicians.

Quasi-convertible Currency subject to Quasi-automatic Control.—Another type of solution in which the human factor would play a less important rôle is the one which has been urged for a number of years by Professor Irving Fisher. According to this plan, the money would consist of paper currency, each note being redeemable in gold—not a definite amount of gold as in the old system, but rather an amount determined at fixed intervals in accordance with the variations in the value of gold. A Government commission, working under set rules, would determine the index-number at the end of each of these intervals, and would then announce a new gold equivalent for the currency such as to restore the index-number to its former value. Such a plan would unquestionably, under ordinary circumstances, provide a satisfactory currency system. It would not be difficult to operate, and it would keep prices at a nearly constant level.

Nevertheless it is not free from objections. In the first place, while it would offer less temptation to a Government than the first plan, it is still subject to defeat through human frailty. For example, since the determination of index-numbers cannot be made absolutely automatic, a dishonest member of the Government might sell advance information. Fisher proposes to eliminate speculation on the Government's decision by a system of brassage. I have not been able to see that this device would accomplish its purpose. On the other hand, I do not share his objection to speculation in general, which, on the whole, seems to be a sort of balance wheel which gives stability to trade movements. But everyone will admit that the kind of speculation that is based upon inside information obtained from a Government office is unwholesome.

In the second place, the proposed procedure is intermittent in character, and it would seem that there must always be some degree of nervousness in business circles towards the end of each period, before the announcement of the new gold equivalent of currency.

Finally, there is now a strong argument against this plan which could not have been raised at the time it was proposed, for this method of stabilising currency would to a large extent restore the use of gold as a financial medium, with a consequent rise in the essential value of international debts.

Convertible Currency subject to Complete Automatic Control.—Now we come to a discussion of the plan which I have suggested. In principle the plan consists in keeping the general monetary system as it existed in the great majority of nations before the war, and merely substituting for gold a composite of commodities. The gold standard has never actually been maintained in any country except through the device of convertibility. The automatic control of monetary value established by this principle of convertibility is the one which has proved satisfactory in practice; and while we have seen that there are other methods which are theoretically possible, their success would always depend upon an elaborate machinery and upon the intelligence and good faith of the Government.

Let us see, therefore, how feasible it would be to employ a paper currency convertible at all times into a composite of commodities—a set or bundle consisting of a definite list of commodities in fixed amount. I confess that such a suggestion lends itself to caricature. One could picture a labourer presenting a five-dollar bill at a Government office and returning home with a wheelbarrow containing a pound of coal, a cabbage, an egg, one stocking, one-sixteenth of a kitchen table, etc.

Such a picture represents the first reaction upon hearing the proposal of a composite commodity dollar. Even Professor Fisher, in his friendly presentation of my plan, makes it seem a far more awkward sort of mechanism than I believe is at all necessary. The fact is that a great step would be taken if only two commodities were substituted for the single commodity gold. Indeed if the bimetallists had changed a single word in their formula they would have been proposing something better than the gold standard instead of something worse. If instead of saying, "Let a dollar stand for 25·8 grains of gold *or* 412·5 grains of silver," they had said, "Let two dollars stand for 25·8 grains of gold *and* 412·5 grains of silver," and if this proposal had been adopted, some of the more serious fluctuations in prices would have been avoided. It is obvious that a system of convertible currency based upon this plan would have been no more cumbrous than the one in which gold alone is employed.

This is essentially the plan which has received the name of

symmetalism. The chief objection to it is that gold and silver are too much alike in their mode of production and of employment. In general a system of currency based upon two dissimilar substances, each having about the same average fluctuations in value, would be far more nearly stationary than a system based upon either one alone.

If instead of two commodities we should select three or four, carefully chosen, the value of money would be far more constant still, or, in other words, the index-number would be nearly stationary.

Now if we are to abandon the gold standard, it would be the height of pedantry to attempt to secure a currency of absolutely stationary value. Minute temporary fluctuations, or even large changes occurring gradually over a long period of years, would have no deleterious effect upon society. It is only sudden or large fluctuations that produce marked changes in prices and wages, and an increase in the speculative character of all loans, thus causing serious disturbance of business, and discontent among the people. Presumably, for example, a steady change in the value of currency amounting to one-half per cent., or perhaps even one per cent., per annum, would be entirely unnoticed except by the professional statistician.

The problem, therefore, is not to devise an absolutely stationary monetary system, but rather one in which fluctuations are as small as is compatible with a convenient and simple mechanism of conversion of the standard set of commodities into money, and the reverse.

It is my belief that a satisfactory result could be obtained by the employment of a standard set composed of only four commodities, if these commodities were wisely chosen and if the amount of each entering into the standard set were suitably determined. However, the decision as to the number of basic commodities, the choice of these commodities, and the fixing of the amount of each entering into the standard set should be made after careful study by men possessing expert knowledge of past and present economic conditions. If, therefore, in the following section I employ a concrete illustration of the mode of operation of the plan here contemplated, I beg that it be regarded as an illustration and nothing more.

The Warrant System with a Convertible Composite Money.—Merely for the purpose of our illustration, let us select four commodities to be used in our composite standard of currency. First, let us choose the most important of food-stuffs, wheat,

with such specifications as to quality as are already familiar in the Wheat Exchange. Second, let us choose the most important textile material, cotton. Third, let us choose the most important of metals, iron. Finally, as our fourth commodity we may, partly as a concession to sentiment, partly because of its already large financial employment, choose the precious metal silver.

Likewise for the purpose of illustration let us call our currency unit one *tal*, and a note for 1000 tals may, if we like, be called a *kilotal*, or, for short, a *kil*. This kil will have the value of a pounds of wheat, b pounds of cotton, c pounds of iron, and d pounds of silver, these quantities being fixed at the outset, once for all, and subject to no later alteration.

Anyone possessing a note for one kil may present this at a Government office and receive therefor four warrants, the first of which entitles him to receive a pounds of wheat; the second, b pounds of cotton; the third, c pounds of iron, and the fourth, d pounds of silver.

Now while the value of a wheat warrant, a cotton warrant, an iron warrant and a silver warrant would together be always exactly one kil, the market price of the individual warrants would vary. Thus, for example, a wheat warrant might be worth 200 tals now and 220 tals a year from now. This, however, would be a matter of no particular concern to the Government. It would always upon demand issue the four warrants for every kil turned in for that purpose, and conversely would give one kil in currency for every set of four warrants brought in.

It remains to provide for the conversion of the individual warrants into the corresponding commodities, and *vice versâ*. A bank established by the Government, or under the supervision of the Government, would presumably act as the medium for these exchanges. The bank itself need not handle the commodities for which warrants are issued, but might give in exchange for a warrant an order upon some reputable firm, for which it would pay the current rate quoted on the Exchange. Thus a person presenting ten wheat warrants to the bank would receive an order for $10 \times a$ pounds of wheat upon some member of the local Wheat Exchange; and a person wishing to sell $10 \times a$ pounds of wheat would receive therefor ten warrants purchased from the bank at the current rate.

If the Government desire to avoid speculation in warrants, it could make these warrants valid for a short time only, but I do not myself see the necessity for such a provision. The bank might act in these exchanges as banks do in very similar transac-

tions involving foreign moneys, taking whatever small profits or losses might result from the fluctuations in value of individual warrants; or it might act merely as the financial agent of the Government. In either case payment to the bank would be necessary for its services in conducting the exchanges. This payment might be made out of the general funds of the Government, or a small commission might be charged for each transaction, corresponding to the brassage of some older systems of currency. All of these, however, are details which need not be entered upon at present.

In countries which might possibly be cut off from the supply of one or more of these basic commodities, it might be desirable to establish Government warehouses for storing one or more of the basic commodities, but this is no essential part of the plan, and indeed it is usually found best not to tax the Government with duties which can equally well be performed by the existing machinery of private enterprise. The fact that the Government possesses no reserves will not affect the value of its money as long as the people are confident that the Government will fulfil its obligations to convert its money into the basic commodities.

It must be admitted that there is nothing even in this plan to prevent a Government in desperate straits from repudiating its obligation to redeem the paper money in commodities and thus cause a depreciation in the value of money. Yet such a step would be a definite confession of bankruptcy. Sometimes when Governments have refused to redeem paper money in gold they have had the valid excuse that there was no available gold. With the composite currency such an excuse could not often be given.

Finally, we must consider how such a monetary system could be substituted for existing systems. Some authors have felt that it would be an injustice to fix prices permanently at their present high level. I suspect, however, that most of the ills produced by a change in the price level are suffered within the first year after the change occurs, and that a later restoration of the original price level would not so much relieve old injustices as create new ones. Whatever theory we adopt in this regard, the desired result could readily be effected by the new monetary system.

Thus, to take a specific example, let us assume that England desired to maintain for ever the existing price level by the method here outlined, basing its currency upon the composite standard of wheat, cotton, iron and silver, but without any nominal

change in its monetary unit. It would then be only necessary to provide for the conversion of a thousand pounds sterling into *a* pounds of wheat, *b* pounds of cotton, etc., the quantities *a*, *b*, *c* and *d* being so chosen that the whole set of commodities at the present market price would have the value of £1000. The change to the new system would be entirely imperceptible to the man on the street, who would only observe with satisfaction that the cost of living had become stationary.

If, however, it were desired to fix the price level as it was before the war, or, as a third and compromise alternative, to fix the level so as to restore the normal exchange between the pound and the dollar, it would be possible to determine the quantities *a*, *b*, *c* and *d* so as to produce this result. Either of these decisions, however, would mean an appreciation of money, and this should not occur abruptly. But if some future date were set for the establishment of the new system, a gradual appreciation would occur through the ordinary agencies of discount and speculation, so that once more the transition would occur on the specified date without being noticed by the average citizen.

If two or more nations desired to adopt such a convertible composite currency it would not be necessary to change the units of money in these countries, but it would be desirable for each to adopt the same basic commodities and the same ratios of *a* to *b*, to *c*, to *d*. In such event the fluctuations in the rate of exchange between the two countries would not be much greater than it was before the war under the gold standard. In the long run the rate of exchange would depend upon the cost of transportation of the basic commodities from one country to another.

Here, then, in this convertible composite currency we have a monetary system which could be put into operation with the minimum of machinery, without the slightest disturbance of business, and almost without the knowledge of the average citizen. It conserves all of the advantages which long experience has shown to belong to a convertible currency. There is no universal panacea for human ills, but I earnestly believe that the general adoption of a monetary system of this type would not only relieve many of our present embarrassments, but would, for a long period to come, remove some of the speculative character of private debts and eliminate the popular discontent and disturbance of business which have hitherto been caused by a currency of inconstant value.

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ECONOMIC THEORISTS AMONG THE SERVANTS OF JOHN COMPANY (1766–1806)[1]

WHEN the British first came into power in Bengal, in 1765, the first economic problem that faced them was the currency of the country. Diverse kinds of rupees were then in circulation, in various stages of debasement. In framing their schemes of reform, the servants of the East India Company were naturally guided by the economic doctrines then current in England, subject to modifications due to the peculiar social and economic condition of Bengal.

Expert economic opinion in England was at that time opposed to bimetallism. In the very year of the battle of Plassey, 1757, Harris, in his *Essay Upon Money and Coins*, condemned bimetallism.[2] He considered silver to be the fittest material for money, as being less subject to fluctuations than gold. But neither silver nor gold monometallism was then practicable in Bengal. The silver standard, though it had long been in existence in the province, had broken down on account of shortage of the metal. The gold standard, which was almost an accomplished fact in England at the time, was out of the question in Bengal, where even the silver rupee was of too high a denomination for ordinary transactions.

Clive was therefore obliged to adopt bimetallism in 1766. But from its very inception the plan was foredoomed to failure, as the official ratio between gold and silver was much higher than the market ratio.[3] Clive and the members of his Council seem to have had no idea of the economic consequences of this divergence between the two ratios, and they issued the following notice on the 30th June, 1766 :—

[1] This article is mainly based on the Public Department Records of the English East India Company from the year 1766 to 1800 A.D., preserved in the Imperial Record Office, Calcutta. I have consulted in this connection the District Records recently published by the Government of Bengal, Seton-Karr's *Selections from the Calcutta Gazette* (Vols. I and II), MacGregor's *Commercial Tariffs*, and the writings of Verelst, Sir James Steuart, Colebrooke, Harrington, Prinsep, Wilson, Hunter and Thurston.

[2] Harris, *An Essay Upon Money and Coins* (1757), Part I. Pp. 57–8.

[3] Sir James Steuart, *The Principles of Money applied to the Present State of the Coin in Bengal* (1772); and Harrison, "The Past Action of the Government of India with regard to Gold" (ECONOMIC JOURNAL, Vol. III).

"Notice is hereby further given that any person or persons discovered in attempting to make a variation of the exchange here settled between gold and silver or in obstructing the currency of a new coin by refusing to accept it in payment, if natives they will be punished with the utmost severity, if Europeans they will forfeit the Company's protection and be sent to England forthwith."

But this stringent order proved quite ineffective. Economic laws have little respect for statesmen and administrators. It was no wonder that silver gradually disappeared from circulation. Where it circulated at all, it commanded a premium; in other words, gold *mohurs* passed at a discount, which rose to about 38 per cent. even in Calcutta within a year and a half.

Verelst, who succeeded Clive as the Governor of Bengal, had sounder knowledge of economic theory. He ascribed the breakdown of bimetallism to the over-valuation of gold. In his Minute of the 1st September, 1768, Verelst observed that the gold currency of 1766 had encouraged the import of gold "by putting a current value upon it considerably above its real one." The gold *mohurs* of 1766 were withdrawn from circulation, and on the 20th March, 1769, the official ratio between gold and silver was reduced from 16·45 to 14·81.[1] Even this new ratio was 5·71 per cent. higher than the market ratio. The result was that this second attempt at bimetallism also failed.

Neither the Court of Directors in England nor the Company's servants in India could find a correct solution of the currency problem of this province. The matter was therefore referred to Sir James Steuart, who embodied his views in his *Principles of Money*. In this book he explained at great length that bimetallism could succeed only if the ratio between gold and silver coins was frequently adjusted to keep it "exactly in proportion to their value as metals." It was better in his opinion to have a mixed standard with coins of both metals "in the same mass" instead of ordinary bimetallism. He was therefore one of the earliest economists to suggest a scheme like symmetallism. "Were mankind all philosophers," he explained, "I should propose to mix the gold and silver together in the same mass, according to the market proportions of the metals, and to make the coin out of this mixture. I am not so extravagant as to propose so great an innovation. I throw it out merely as a hint." The remedy he actually proposed was the introduction of paper money. A great

[1] Steuart, *loc. cit.*, p. 34.

banking institution like the Bank of England, with branches in different districts, was to be started and controlled by the Company, which was to issue notes upon some specified kinds of security. This was then regarded as too far in advance of the time.

The failure of two successive attempts at bimetallism and Sir James Steuart's condemnation of the double standard converted the Company's servants to silver monometallism. Thus Francis, Clavering and Hastings,[1] although differing in their plans for the establishment of a stable standard of value, were unanimous on this point.

Francis, however, recognised the suitability of gold for large payments. He recommended the issue of gold *mohurs* at the rate of Rs. 16 per *mohur*. These were not to be made legal tender, but "that the paying or receiving of them be left to a voluntary agreement between the parties." The use of gold coins as optional currency with silver as the standard of value was also advocated by Locke, Harris and many other English writers.

Calvering was also a strong monometallist. But he differed from Francis on one point. The latter proposed that the existing weight of the sicca [2] rupee was to be maintained, while its fineness was to be reduced to the English standard [3] to make it more suitable for circulation. Clavering's plan was that the amount of pure silver should remain unaltered in the sicca rupee, but its fineness was to be reduced to the English standard. This would, of course, increase the weight of the rupee and thus raise the standard of weight in the country. Clavering held the currency theory that the value of all things depended on the bullion value of the standard coin. He also recommended stopping the circulation of gold altogether. He was thus a more uncompromising monometallist than Francis or Hastings. Francis, as we have seen, advocated the issue of gold *mohurs* as optional currency. Hastings, though he would stop future coinage of gold, did not demonetise the existing gold *mohurs*.

By his Regulations of the 29th May, 1777, Hastings set up a

[1] Governor-General of India from 1774 to 1785. Sir Philip Francis, believed to have been the author of the *Letters of Junius*, and General Clavering were Members of the Council of Warren Hastings. Both Francis and Clavering were influenced by the economic theories of Sir James Steuart. Francis in his Minute on Coinage, dated the 13th March, 1775, quoted a passage from the *Principles of Money*.

[2] Newly-coined silver currency of the Mughal Emperors struck in Bengal.

[3] The English standard for silver was then, as it is now, 92·5 fine, while the siccas were at that time 98 fine. The weight of the sicca rupee was 179·666 grains (troy), approximately equal to 1 *tola*, the unit of weight in Bengal.

kind of limping standard by suspending gold coinage. This continued for three years, but the mint was again opened for the coinage of gold for the next eight years, up to December 1788. In a Notification of the 17th September, 1777, it was laid down that gold *mohurs* would " universally pass in circulation at the usual value of 16 sicca rupees each, and be received and issued at the public treasuries at the same rate." But the fate of this Notification was no better than that of the previous ones on the same subject. Gold *mohurs*, the currency of which was practically confined to Calcutta, began to circulate even there at a discount. The *batta* [1] for exchanging gold *mohurs* into rupees, which was only 5 annas per Rs. 100 in March 1787, rose to Rs. 3 in the course of five months.

On the 26th of September, 1787, Cornwallis therefore appointed a Committee to inquire " into the cause of the scarcity of silver coins." The Committee at first analysed the causes of depreciation of gold *mohurs* and then went on to discuss the causes of the premium on rupees. They failed to realise that these two were not really different but merely the two aspects of the same problem. In their opinion, the depreciation of *mohurs* was due to their limited demand, combined with increased circulation of paper. " The accumulation of any specie in one place," said the Committee, " must cause great plenty of that article. This plenty, whatever extent it has in itself, is, as it were, increased by the paper, which is in circulation at the Presidency."

The Committee ascribed the scarcity of silver in Calcutta to numerous causes. They pointed out the increase in the remittance of revenue through bills for the last two years, during which period, out of a total remittance of $7\frac{1}{2}$ crores, $3\frac{3}{4}$ crores had been sent in bills, $1\frac{3}{4}$ crores in sicca rupees and the rest in gold. The stringency of silver in Calcutta had been very acute

[1] *Batta* literally means the premium or discount for exchanging different kinds of coins. Properly speaking, the *batta* on *mohurs* at that time consisted of two distinct elements. The smaller portion of the charge represented the rate for converting one kind of currency into another. But there was another and more important element in the *batta*, which represented the over-valuation of gold in terms of silver. In fact it was this element which, instead of driving out undervalued silver, kept it in circulation.

With regard to the *batta* on *mohurs*, there was no unanimity of opinion among the Company's servants. The more intelligent of them considered it to be due to the divergence between the mint and market ratios of the two metals. Others ascribed it to the intrigue of the shroffs (money-changers), although it was really the consequence of the economic blunders of the Government. An interesting parallel is to be found in the outcry against profiteering during the War. This was the natural *result* of rapidly increasing prices due to the inflationist policy of Governments and not the *cause* of high prices, as was popularly supposed.

from April to August 1787. This, continued the Committee, was mainly due to the drain of silver to the *aurungs* [1] to provide for "investments," with no return of rupees to Calcutta in the shape of land revenue during these months.

These were temporary causes of the scarcity of silver, but a more permanent cause was the general diminution of silver in the province on account of its reduced import from Europe for the last thirty years and its increased export to other Presidencies and to China. Besides these, there was another cause, observed the Committee, "and perhaps not the least of those already adduced, of the diminution of the silver coin in Calcutta," viz., "the too high value of the gold coin compared with that of silver."

The Committee pointed out the danger of fixing the ratio between gold and silver in this country by looking at the ratio ruling in England. In the opinion of the Committee, "the medium proportionate value of the two metals in Europe may be taken at 15 of silver for 1 of gold; in India, they may be estimated at 12, or at least 13, to 1." [2] "In lowering the value of the gold coin, by raising that of silver, to the natural relative values they seem to bear to each other in India, silver coins would, we think, increase and occupy that place in the circulation which is filled with the superabundance of gold." Thus the Committee, after considerable circumlocution, traced the real economic cause of the disappearance of silver and suggested the correct remedy.

In the report of the Committee we find also the following interesting remarks on the salt tax in Bengal :—

"The profits arising from this monopoly certainly operate as a tax upon the public equal to the whole amount of the enhanced price thereof, and as salt constitutes an article of living that cannot be dispensed with, bears particularly hard on the lower orders of the community, the ryot, the weaver and others, whose ingenuity and industry is their only fortune and which barely suffices to procure them subsistence. It is not, therefore, an equable assessment, where every man should contribute to the exigencies of the State according to his means, nor is it felt by the rich in circumscribing their luxuries and enjoyments, but is,

[1] Places of manufacture.

[2] On the margin of this line of the Report of the Committee in the Imperia Record Office, Calcutta, there is the following interesting remark : "Vide Smith's *Wealth of Nations*, Vol. I, p. 265." From the character of the handwriting, it is clear that this note must have been inserted at the time of writing of the Report. This fact gives an instance of the tremendous influence of Adam Smith's epoch-making book, which was quoted only eleven years after its publication in a Government report in this country.

in fact, a tax upon industry. This must lessen the ability of the ryot to pay his rent, increase the price of the manufactures by raising the value of labour and consequently reduce the quantity."

This passage may easily be mistaken for an extract from the last Book of the *Wealth of Nations*, where Adam Smith discusses the question of tax on necessaries. The members of the Committee of 1787 must have been conversant with Adam Smith's ability theory of taxation and his idea that a tax on necessaries becomes a tax on labour.

The Government did not take any immediate action after the publication of the Report. The first step was to stop the coinage of gold *mohurs* by an order of the 3rd December, 1788. Two months later, Cornwallis took another step in the right direction. The official rate of exchange was reduced [1] to 15 siccas and 1 Arcot rupee [2] for a gold *mohur*, and an order similar to Clive's Notification was issued on the 18th February, 1789. This order seems to have been enforced only in Calcutta and led there to a series of prosecutions of the shroffs for charging illegal *batta* on *mohurs*. Mr. Motte, the Superintendent of Police, in his letter dated the 16th March, 1789, described how he carried one " Govinram Poddar to the Burrabazar, and with the tomtom declared his crime."

The next step taken by the Government was to discontinue the seigniorage of 1 per cent. on the coinage of silver by a regulation of the 20th February, 1790. But this measure hardly brought any relief in the shape of increased supply of rupees. The war with Mysore was going on and draining Bengal of its silver. The Government was, therefore, compelled to reopen the mint for the coinage of gold. It was notified on the 21st of July, 1790, " that from and after the 1st of the next month, gold bullion would be received and coined without any charge to individuals." Thus the policy of raising the value of the gold *mohur* by suspending its coinage was abandoned after a year and a half. The supply of *mohurs* became relatively abundant and the *batta* on gold coins again ruled high. The Government was sorely perplexed at this state of affairs. Mr. Harris, the Mint Master in Calcutta, in his

[1] It is assumed by all writers that the official rate of exchange between gold and silver coins, viz. 16 siccas per *mohur*, remained unchanged throughout. But it is clear that there was a temporary reduction. The old rate was, however, restored by the year 1792.

[2] Originally, this rupee was struck by the Nawab of Arcot in the Madras Presidency. By 1740 the English, French and Dutch secured the privilege of coining Arcot rupees. After the establishment of the Calcutta mint, the English East India Company began to coin Arcot rupees there, mainly for circulation in Dacca and Cuttack districts. The amount of fine silver in the Arcot rupee was generally 7 per cent. less than the sicca rupee.

letter quoted in the Public Proceedings of the 22nd September, 1790, observed, "that the present high *batta* in exchanging gold into silver is not caused by a disproportion of the metals is evident, because there is no *batta* on the Moorshedabad and Patna gold *mohurs*, which are known to the shroffs to be from 2 to 6 per cent. worse than that of the Calcutta coinage." [1]

Mr. G. C. Meyer, the Superintendent of Police, seems to have grasped the real cause of the currency trouble better than the currency experts of the Government. In his letter of the 3rd November, 1791, he declined to take any coercive measure against the shroffs on the following economic grounds.

His first reason was that gold and silver coins under the existing circumstances should be treated "simply as commodities of which one was to be bartered for the other, and not as the standard or measure of value of other commodities." Consequently, "the exchange value or price of each would be determined by the same principles which regulated the price of every other commodity that comes into the market," viz. by the "ratio between the demand for that commodity and the quantity of it forthcoming to supply such demand."

His second argument was that the adoption of coercive measures would "only aggravate the evil complained of." "The quantity of fine gold in the *mohur*," he continued, "is confessedly not of equal value in the market to the quantity of fine silver in one Arcot and fifteen sicca rupees." If the shroffs were compelled to exchange the gold *mohur* into rupees at the official rate, it "would exchange for more silver in coin than it would purchase in bullion. The consequence of this would be that if the difference were considerable enough to bear the expense of freight, insurance, etc., etc., the silver would be exported to foreign markets and there exchanged for gold, which would be brought back in order to be exchanged for silver, which would be again exported as long as it yielded any profit." But even if it were not profitable to export silver, it would pay to melt it down and sell the bullion for gold coin. In any case, a large amount of silver "would be withdrawn from circulation, to which it could not be restored without a constant and heavy charge on the Public Treasury."

These arguments convinced Cornwallis of the futility of coercive measures against the shroffs, and in a Notification of the 18th November, 1791, it was declared that in future the sale of gold and silver coins would be as free and unrestrained as that of gold and silver bullion. Thus the relation between gold and

[1] It is difficult to see how this could have been.

silver currency, which existed in Mughal times, was restored after twenty-five years.

Some eight months before the publication of the Notification of November 1791, there was an acute stringency of money in Calcutta. On the 12th March, 1790, the chiefs of the leading Agency Houses of Calcutta wrote to Cornwallis: "The quantity of specie now in circulation is inadequate to the current business of the settlement, and . . . the value of money has in consequence risen and that of the Company's paper has sunk in so great a degree that whereas money might have been borrowed to any amount by persons of adequate credit at 10 per cent. on personal security only so lately as November last, and at 8 or 9 per cent. when a security of Company's paper was given, it cannot now be borrowed on any security at legal interest,[1] and whereas the Company's paper then bore a premium, the same paper now sells, when it can be at all sold, at discount from 10 to 12 per cent."

We find here an instance of the rise in the market rate of interest causing a fall in the price of securities. In ascribing, however, this dearness of money to the decrease in the quantity of specie in circulation, these European merchants were simply repeating the erroneous theory of John Locke and many other seventeenth-century English writers. As every student of economics knows, the rise in the rate of interest takes place when the demand for loanable capital outstrips the supply. If the quantity of money in circulation declines, the price level would ultimately fall, and this would bring down the rate of interest. It is true that a sudden drain of money from a country may bring about a contraction of credit, and this would ultimately raise the rate of interest. But this reduction of credit is only the natural sequence of a trade boom. The drain of money only hastens the crisis, which would have arisen, sooner or later.

The chiefs of the Agency Houses suggested that in order to meet the stringency of money the Government should print promissory notes to the extent of ten lacs of rupees, and undertake to receive these notes in all payments due to it. These papers were to be lent to the European merchants at an interest of 8 per cent.,[2] and there was to be a moratorium of all payments to the

[1] By a regulation of the 28th March, 1780, 24 per cent. per annum was declared to be the legal rate of interest when the principal did not exceed Rs. 100, and 12 per cent. per annum when the principal exceeded Rs. 100.

[2] The chiefs of the Agency Houses thus wanted for a certain period (six months) a loan at less than the current rate of interest. Their trouble was therefore really due to the contraction of credit as a result of their over-trading and speculative transactions for some time past, and not due to the insufficiency of money in circulation

Government until these notes were ready and the loan tendered. The signatories of the above letter undertook to receive such notes in all payments among themselves.

In reply to this representation, Cornwallis pointed out that the promissory notes, if they were issued, would immediately bear a discount, as there was no plan for redeeming them, and thus the scheme would be unworkable. "It is incident to all paper currency," continued his lordship, "that its full value cannot be upheld longer than the paper can be converted into cash at the option of the proprietors."

More than a year and a half after the monetary stringency of March 1790, there was a financial panic [1] in Calcutta. In November 1791 there was a run on the two European banks in Calcutta. During the eight days from the 20th to the 27th of November, the Bengal Bank [2] paid out more than 8 lacs of sicca rupees. On the 28th November, Mr. Benjamin Mee of the Bengal Bank applied for a loan of 5 lacs of rupees in specie for three months at the rate oı 12 per cent. per annum upon depositing Company's paper to the full value as security. A similar application was made also by Mr. T. Redhead of the Bank of Hindustan for a loan of 1½ lacs of rupees on practically the same conditions.

In spite of the positive orders of the Court of Directors not to engage in any pecuniary transaction with the private banks of this country, the Government of Lord Cornwallis granted the applications of the banks on their depositing Company's paper 25 per cent. above the advance they required.[3] In their minute of the 29th November, 1791, the Board remarked that "the rejection of the application before us would tend to depreciate Government securities."

It is not necessary to discuss here the recommendations of the Mint Committee of 1792, as they do not refer to any interesting economic theory. The Report, however, is an important landmark in the currency history of Bengal. It forms the basis of the Government resolution of the 21st November, 1792, and of the currency reform of 1793. In the latter year bimetallism was again attempted in Bengal.

Mr. Harrison writes [4] that on this occasion the Government

[1] I have not been able to trace the cause of this panic. Could it be due to rumours of British reverses in Mysore?

[2] This should not be confounded with the Bank of Bengal, recently merged into the Imperial Bank of India.

[3] The panic soon subsided. In his letter of the 30th November, 1791, Mr. Mee thanked the Government for the liberal offer of assistance, which, he added, was no longer necessary.

[4] ECONOMIC JOURNAL, Vol. III, p. 54.

erred on the other side and slightly undervalued gold in terms of silver. This statement, however, is not confirmed by the papers in the Public Department of the Imperial Record Office. We do not come across any instance of the disappearance of gold from circulation which would have been quite a striking phenomenon in those days, and would have found at least a passing mention in the records of the period. On the other hand, we find Mr. Caldecott, the Accountant-General of Bengal, in his letter of the 21st February, 1794, alluding to the discount on *mohurs*. In this letter Mr. Caldecott suggested that *mohurs*, their halves and quarters, should be sent to the *mofussil* to reduce the disproportion between gold and silver coins in Calcutta. But "it appears to admit of some doubt," he added, "whether the *batta* can be done away (with) without making such an addition to the quantity of pure gold in the *mohur* as is requisite to render its intrinsic value equal to the intrinsic value of sixteen sicca rupees."

A fluctuating *batta* on gold *mohurs* continued almost up to the end of the century. On the 1st January, 1800, Mr. Meyers, the Accountant-General, however, reported that the discount on gold *mohurs*, which had become as much as Rs. 4—3 as. per cent. in March, 1796, had ceased to exist since September 1799. This was mainly due to the large importation of silver at that time.[1] This influx of silver by reducing its value brought at last to a parity the market and the mint ratios of the two metals. Another reason was the increasing use of gold coins in the *mofussil*, except in some backward parts. By the end of the century the currency difficulties of Bengal were well-nigh over. The year 1795 saw the final establishment of the nineteenth *sun* sicca rupee[2] as the

[1] As the editor of the Calcutta *Gazette* wrote on the 28th November, 1799, "the amount of silver only, imported by sea within the last four months, (was) near one crore of sicca rupees, or about one million two hundred thousand sterling." About one-half of this amount had been on Government account. For the first time, after an interval of forty-one years, the Company imported to Bengal £99,699 of bullion in 1798.

[2] That is, sicca rupee bearing the date of the 19th *sun* or year of the reign of Emperor Shah Alum. The reason for putting this invariable date on coins minted in different years was that the shroffs charged discount on old coins, even though they had not deteriorated at all.

There is some confusion regarding the date of the introduction of this clever measure for outwitting the shroffs. According to the Mint Committee of 1792, the date was 1773. This has been repeated by all subsequent writers, including Harrison. But as Shah Alum succeeded his father as Emperor in 1759, the nineteenth year of his reign could not possibly be 1773. I made a reference to Mr. Foster, who searched the India Office Records of 1773, but could not find the order referred to by the Mint Committee. Mr. Allan, the well-known expert on Indian coins, was kind enough to examine for me the complete set of coins at the British Museum. He did not find any 19th *sun* sicca rupee before 1778. For

standard coin of the province in place of a variety of old and light coins of different weight and standard, which had so long been in circulation. The method of coinage had also improved, making clipping and counterfeiting more difficult. The *batta* on *mohurs* which had been troubling the Bengal Government since the days of Clive had at last come to an end, at least in Calcutta. But the Court of Directors had made up their mind to abandon bimetallism in all the Presidencies.

In their famous Dispatch [1] of the 25th April, 1806, the Court of Directors observed :—

"It is an opinion supported by the best authorities, and proved by experience, that coins of gold and silver cannot circulate as legal tenders of payment at fixed relative ratios . . . without great loss; this loss is occasioned by the fluctuating value of the metals of which the coins are formed." They therefore recommended the adoption of silver monometallism with gold coins as optional currency, which "should not be forced into circulation at a fixed value in silver coin, but left to find its own level." The subsequent history of the currency system of Bengal is well known. The circumstances under which the Government definitely abandoned bimetallism and adopted a rupee of uniform weight and fineness as the standard coin throughout British India, and how they ultimately stumbled upon the gold exchange standard, have been told by many writers.

Thus the official records left by the Company's servants throw interesting sidelight on the economic thought in England during the latter half of the eighteenth century. We find, in the writings of these busy officials, who were anything but economic experts, fairly accurate ideas about bimetallism and Gresham's Law. Some of the Company's servants appear to have also realised the possibility of a concurrent circulation of gold and silver on the principle of limitation of supply. This economic theory, which was later on developed by Ricardo and formed in the nineteenth century the basis of the limping standard, seems to have influenced the suspension of gold coinage by Hastings in 1777 and by his successor eleven years later.

It may therefore be naturally asked, why did the Company's servants fail repeatedly in their attempts at establishing bimetallism in this province? The answer is that it was very

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fuller details, reference may be made to a paper on "Some Currency Reforms of Hastings" read by me before the Indian Historical Records Commission in January 1924, and subsequently published by the Government of India.

[1] The whole of this Dispatch is printed in the House of Commons Return, No. 127 of 1898.

difficult in those days to fix the mint ratio in such a way as to correspond exactly with the market ratio between the two metals. Bitter experience soon taught the Company's servants that the market ratio varied not only from province to province, but also from district to district. Bengal in those days was not a single economic unit. Different kinds of rupees, more or less debased, were in circulation in different parts of the province. It was hardly possible to fix the accurate ratio between the gold *mohur* on the one hand and the different kinds of rupees on the other. It is not, therefore, surprising that bimetallism attempted under such conditions failed.

But does the record of this failure establish a case against gold currency in India? It is a matter of common knowledge that during the latter half of the eighteenth century, England was passing from silver to gold standard by an accidental over-valuation of the yellow metal. Does the limited circulation of over-valued gold coins in Bengal during the same period prove the unsuitability of gold currency in this country at the present day? Such historical inference is hardly fair. It is true that during the latter half of the eighteenth century the prices of all important commodities rose in this province. But Bengal was even then a land of low incomes and low prices, and naturally the gold *mohur* and its subdivisions could have only a limited circulation.

It may, on the other hand, be argued that just as in those days *cowries* [1] were being replaced by silver, the latter metal will in turn yield its place to gold, in view of the rapid rise in prices. But to establish a case for gold currency in this manner is equally unsound. It is, of course, now possible to introduce gold currency, but whether it is more desirable than the gold exchange standard is quite a different question.

The chief advantage of gold currency is that it is less subject to corrupt or foolish practices on the part of Governments than the gold exchange standard. But under ideal conditions the latter is certainly the more desirable currency system. Unfortunately, what we now have is a travesty of the gold exchange standard. The truth is that the currency trouble of John Company has now reappeared in a more acute form. With the official rate of the sovereign fixed at Rs. 10, it is now passing hands for more than Rs. 16. The present *batta* is therefore twenty times the

[1] *Cowries*, or shells, were used as small tokens in many parts of Bengal only a generation ago. But during the middle of the eighteenth century, *cowries* were in some cases used for large monetary transactions also. As late as 1791, even the land revenue in the outlying district of Sylhet was paid in *cowries*.

maximum rate in the days of Cornwallis! This is all the more regrettable, for what the Company's servants with their imperfect knowledge of economics and with their political and commercial preoccupations failed to carry out, has not been accomplished in our more enlightened days.

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LOCAL VARIATIONS IN THE BIRTH-RATE

A GREAT deal of attention has been paid to the differences between the birth-rates of different classes and different occupations, but the striking differences between the birth-rates of different parts of the country seem to have been overlooked. The popular theory that the birth-rate varies inversely with the money-income of the class or occupation is very far from being a complete explanation of the differences which exist. Thus we find a very high birth-rate in Durham, where apparently the proportion of the population living below Rowntree's poverty line was very low; in Stanley, a typical Durham mining village, it was only 5·2 per cent.; agricultural wages in Durham were about 22*s.* 6*d.* a week, a figure we may take as being the local minimum wage for unskilled work. On the other hand, in the South Midland and Southern agricultural and residential counties we find a low birth-rate, although there is a comparatively large proportion of the population living below Rowntree's poverty line; in Reading, a typical town of this area, the proportion was 17·7 per cent.; agricultural wages in this area were only about 16*s.* a week, which indicates a low standard of living. According to the popular theory the birth-rate should be low in Durham and high in the south, but the reverse is the case.

It is useless to attempt to explain completely so complex a problem as the local variations in the birth-rate by any one theory, but it is possible to make some approach towards a solution by an analysis of the birth-rate figures and census returns.

"According to Dunlop's observations on marriage in Scotland, the effect of one year's delay of marriage is to reduce the average family by fully one-third of a child, or that three years' delay may be expected to result in the family being one child less. The result may be fairly correct in general, but it cannot be strictly applied, for the crude observations show that the effect of one year's delay is not constant through the fertile period of the woman's life, but is greater for the younger and less for the later years. Thus a year's delay when the woman is aged from twenty to twenty-five averages 0·45 of a child, 0·37 when

she is aged from thirty to thirty-five, 0·29 when she is aged from thirty-five to forty, and 0·19 when she is aged from forty to forty-five." It requires, it may be noticed, a delay of about forty years on the part of the husband to decrease the number of children by one child.[1]

It appears from this that the age of marriage of women is an important factor in determining the birth-rate. A high birth-rate should be found where the age of marriage of women is low, and a low birth-rate where their average age of marriage is high.

In the annexed table a comparison is made of English and Welsh counties in respect of the proportions of the sexes in the population, the proportion of marriages in which the woman is under twenty-one, and the birth-rates; the proportion of marriages in which the woman is under twenty-one is the most easily obtainable index for comparing the average age of marriage of women in different counties. According to Dunlop's theory we would expect to find a high birth-rate where the proportion of marriages under twenty-one is high, and in fact it will be seen that this is the case; a correlation of + ·77 with a probable error of ·04 is found between Columns 2 and 3. This seems to show that the birth-rate in England and Wales is at any rate partially a function of the age of marriage of the women.

If it is possible to discover what determines the age of marriage of women, which, it will be seen, varies considerably between different counties, a great deal will have been done towards finding the ultimate cause of local variations in the birth-rate.

It is here suggested that the age of marriage of women largely depends on the keenness of the competition for them. The underlying assumption made is that most women wish to get married. Where the number of men exceeds the number of women, it is to be expected that the competition among men for wives will be keen, and the average age of marriage for the women will tend to be low. Where, on the other hand, the number of women exceeds the number of men, the competition for wives will be less acute, and men will tend to postpone marriage.

The psychological assumption is that both sexes will be mutually attracted when they attain a suitable age, and will tend to pair off with an ultimate view to marriage. As the average girl, especially of the working class, thinks, rightly or wrongly, that she will be better off and more independent married

[1] A. M. Carr-Saunders, *The Population Problem*, p. 103.

than single, and as most women take an inordinate interest in a wedding, and so presumably desire to appear at one in a leading rôle, the tendency will be for the woman to try to hasten the marriage; the existence of a surplus of men will make this comparatively easy, as the man in question can be brought "up to scratch" by playing on his jealousy, which will be facilitated by the number of possible alternatives.

The man, on the other hand, although usually intending to get married some time in the future, may not unnaturally be supposed to be more desirous of delaying marriage than the girl. He knows, and this is especially true in the working-class, where men normally attain their maximum earning power at twenty-one, that he will be worse off and far less independent when married than when single, and therefore he will tend to delay marriage. This will be easiest where there is a surplus of women, because the woman to whom he is attached will have less opportunity of bringing him "up to scratch" by means of jealousy, and will probably not be very eager to attempt this for fear of losing him altogether; she will rather tend to continue to "keep company with" him in the hope of marrying him ultimately.

We thus arrive at a kind of Law of Supply and Demand by which the average age of marriage of women is determined. Where the proportion of women to men is high, their average age of marriage is also high, and conversely where the proportion of women to men is low, their average age of marriage is low.

We find that, on the whole, this is so. There is, between Columns 1 and 2 of the table, a correlation of $-\cdot45$ with a probable error of $\cdot067$, or, if the rural and agricultural counties, which form a special case which will be dealt with later, are excluded, there is a correlation of $-\cdot77$ with a probable error of $\cdot05$. If, as has been shown, the birth-rate is high where the marriage-age of the women is low, and the marriage-age of the women is low where the proportion of women to men is low, it follows that the birth-rate will be high where the proportion of males in the population is high, and this is in fact found to be the case. There is a correlation of $-\cdot42$ with a probable error of $\cdot08$ between Columns 1 and 3 in the table, or, if the rural counties are excluded, of $-\cdot81$ with a probable error of $\cdot04$.

Of course it is not claimed that this competition for wives is the only factor to be taken into consideration in explaining the average age of marriage, which, like all other things dependent on human nature, involves a very large number of things vary-

Table Showing County Variations in Sex-Distribution of Population, Age of Marriage of Women, and Birth-Rate.

County.	Females per 1000 Males (1901). Col. 1.	Marriages per 1000 (1901–10) in which Females were under twenty-one. Col. 2.	Births per 1000 living (1901). Col. 3.
London	1118	128	29·0
Surrey	1125	105	24·1
Kent	1032	138	25·4
Sussex	1202	112	22·6
Hampshire	1082	130	25·4
*Berkshire	1055	104	24·5
Middlesex	1129	120	28·4
Hertfordshire	1083	111	24·5
*Buckinghamshire	1045	125	25·9
*Oxfordshire	1111	99	23·5
Northamptonshire	1027	138	27·3
*Huntingdonshire	1050	150	25·3
Bedfordshire	1135	142	24·4
*Cambridgeshire	1053	140	24·9
Essex	1025	142	30·4
*Norfolk	1090	138	26·3
*Suffolk	1059	139	26·2
*Wiltshire	1005	112	25·0
*Dorset	1020	116	23·8
Devon	1121	111	23·5
Cornwall	1149	122	24·4
Somerset	1111	101	23·5
Gloucestershire	1152	105	25·6
*Hereford	1074	91	23·5
*Shropshire	1023	102	26·2
Staffordshire	1009	182	32·9
Worcestershire	1113	128	28·6
Warwickshire	1063	160	30·7
Leicestershire	1080	156	28·6
*Rutland	1001	112	22·9
*Lincolnshire	1033	166	26·8
Nottinghamshire	1050	213	31·4
Derbyshire	1012	191	30·5
Cheshire	1089	120	26·8
Lancashire	1082	137	28·5
West Riding	1056	177	28·9
East Riding	1040	177	30·2
North Riding	1021	176	29·6
Durham	972	228	36·2
Northumberland	993	178	32·4
*Cumberland	1037	136	27·7
*Westmorland	1111	87	22·6
Monmouth	962	208	34·6
South Wales	983	170	32·4
*North Wales	1044	76	26·1
England and Wales (average)	1068	146	28·5

* Agricultural Counties.

ing in individual cases, as well as the general custom of the district and the sufficiency or otherwise of suitable houses.

The rural counties do not appear to conform to the tendencies which we have enumerated, or at any rate they only conform in a slight degree. The reason for this seems to be that the rural community is essentially a stable and static community, whilst the urban community is expanding; hence the age of marriage is comparatively late in the country; a young man may have to wait some years before the death or retirement of one of the older members of the community gives him a business opening. Amongst the rural labouring class marriages are also delayed on account of the housing shortage, which always appears to have been acute on account of the agricultural labourer's inability to pay an economic rent, and of the necessity for many young labourers to remain single, because farmers would, in many districts, only employ men who were prepared to "live in."

This last factor seems to be very important; the practice of farm-hands "living in" is commonest in pastoral districts, where the average number of men employed on a farm is small; in arable districts, where the average number of men employed on a farm is much greater, and there are fewer animals to look after, the practice is not nearly so common. As might be expected from this, it is in the arable counties, where the practice is least prevalent, like Lincolnshire, Cambridgeshire, Huntingdonshire, Norfolk, and Suffolk, that the proportion of women marrying under twenty-one is greatest, and in the pastoral counties, where the practice is most prevalent, like Westmorland, North Wales, Hereford, Shropshire, Wiltshire, and Dorset, that the proportion of women marrying under twenty-one is the lowest.

Granted that the birth-rate is largely determined by the age of marriage of the women, and that this, in turn, is largely determined by the proportion of males to females, we have to ascertain the cause of the great variations in the latter which are shown to exist by Column 1. There can be no doubt that the proportion of men to women depends on the industrial character of a district. Where the main industries call for men's labour, like mining, iron and steel, shipbuilding, and engineering, the proportion of males to females and the birth-rate is high, as in Durham, Northumberland, Monmouth, South Wales, Staffordshire, and Derbyshire. Where the demand for female labour as servants, textile operatives, factory operatives in tobacco and chocolate factories, etc., is strong, there is a low proportion of men to women and a low birth-rate, as in Sussex, Somerset, Gloucester-

shire and Devon. Hence the birth-rate seems to depend ultimately on the industrial character of a district.

This seems to be fairly satisfactory in explaining the variations in the birth-rate between different parts of the country. It accounts for the variations from the mean, but obviously will not explain why the birth-rate for the country as a whole is what it is, and why it is greater or less than that of another country.

To sum up, the variations of the birth-rates of different parts of the country seem to depend on the industrial character of the districts; the industrial character of the district determines the sex-distribution of the population, especially at the important period between twenty and thirty. The sex-distribution of the population determines the age at which the women marry through the keenness or otherwise of the competition for them, and the age of marriage of the women determines the birth-rate.

C. T. BRUNNER

THE RECENT CURRENCY AND EXCHANGE POLICY OF JAPAN

THE terrible earthquake which overwhelmed the Kwanto district of Japan on September 1st, 1923, seems to have been similar in its effects to most other great national disasters in that it gave a violent stimulus to the forces of change and unrest, and brought to a head weaknesses in the economic situation of the country which would otherwise have become only gradually apparent. In particular, the sudden depreciation in the exchange value of the Japanese currency during the past year has called the attention of economists to certain faults in her financial organisation and to mistakes of policy, which escaped without sufficient emphasis while the yen was at par. Although it is now generally acknowledged that the earthquake was not the primary cause of Japan's present financial weakness, but rather the occasion for rendering it obvious, yet the decline, which has amounted to over twenty per cent., in the exchange value of the currency has come as a surprise to the greater part of the business world. The reason for this is because it was generally supposed that of all the countries which before the War could claim to be numbered among the Great Powers, Japan had suffered least from that disaster. Her national wealth had increased enormously during the hostilities, and her industries, stimulated by the demands of the Allies and by the prolonged absence of her chief competitors from the world markets, had undergone a remarkable expansion. At the end of 1918 her financial position appeared sounder than that of any important country with the exception of the United States; but it seems now that either her apparent strength was merely the result of the temporary and artificial stimulus of the War, or that her financial policy and machinery have been unequal to the heavy tasks imposed by post-war conditions. The aim of the present writer is to trace the history of Japan's monetary policy since 1914, and to emphasise the somewhat peculiar circumstances which have produced the present financial situation. In particular it will be necessary to deal with a fact which recent events have brought into the foreground of discussion. It is that, while the level of prices has remained remarkably high in Japan since 1920 in spite of the slump and in contrast to the deflationary

movement in England and America, yet there was no corresponding depreciation in the exchange value of the yen until quite recently. In other words, from 1920 to the beginning of 1924 there was a remarkable divergence between the exchange value of the yen and its "purchasing power parity."

In order that the course of events may be quite clear, it is necessary to deal in brief outline with some characteristics of Japan's currency policy prior to the War. Many of the facts are well known, but a repetition of them can scarcely be avoided in anything approaching a complete survey of the subject. One of the main features of Japan's currency and exchange policy for many years past has been the maintenance of large foreign balances, which have been kept mostly at London and which have been used partly to maintain the quotation of the bonds floated abroad by the Japanese Government at a satisfactory figure, and partly as exchange funds. This practice, which was, of course, a common one, pursued by many of the weaker financial States, dates back nearly thirty years in the case of Japan, and its development is interesting because it has such a close bearing on her recent currency history. The practice began in 1895, at the close of the Sino-Japanese War. China, as a result of her defeat, found herself obliged to pay an indemnity of 230 million taels to the victorious Power, and her Government decided to raise the necessary funds by issuing public bonds in Europe. At this time, however, Japan "had the prospect before her of making large disbursements for several years in Europe; while at the same time the price of silver was undergoing great depreciation, so that the Government of Japan was strongly inclined towards the adoption of the gold standard. In view of these two sets of facts, it occurred to Count Matsukata, the Minister of Finance at that time, that it would be to the advantage of both Governments if the indemnity were received in English money." [1] Accordingly, negotiations were opened with the Chinese Government, as a result of which it was agreed that the equivalent of the indemnity in English money (viz. £38,000,000) should be paid to the Japanese Government in London. This was done by means of a series of instalments. In the course of time, part of this sum was brought home to Japan in specie and served to strengthen the gold reserves of the Bank of Japan, but a part of it was kept with an agency of the central bank in London and served as a nucleus of the foreign exchange fund,

[1] Matsukata, *Report on the Post-bellum Financial Administration in Japan*, p. 215.

the maintenance of which has been such a conspicuous feature of the Japanese currency policy since that time.

It does not appear, however, that the establishment of this exchange fund was the result of any far-sighted financial policy, or that it was regarded as anything but a temporary expedient, necessary to meet the needs of the moment. The practice owed its origin merely to the peculiar circumstances connected with the payment of the Chinese indemnity, to the fact that the whole sum could not have been brought to Japan immediately without disturbing the exchanges, and to the fact that Japan was about to embark on a policy of military and naval expansion which involved heavy expenditure abroad. "The Government took advantage of the interval between the receipts and disbursements of the various instalments to utilise various parts of the indemnity fund. Sometimes a portion was employed to relieve the stringency of the money market at home; at other times portions of the fund were invested in a temporary way in the Treasury Bills of both British and Indian Governments; . . . or at times when there was a tendency for our specie to leave the country, a portion of the fund was employed as a provision fund for foreign exchange with the object of preventing the exodus of specie." [1]

This policy became firmly established after the Russo-Japanese War, and a great part of the proceeds of the foreign loans, which Japan raised at that time, was held in London, as is illustrated by the fact that, whereas the Bank of Japan's specie reserve held within the country was only 37 million yen on December 31st, 1905, the balance in London on the same date amounted to 442 million yen.[2] The following table shows that the policy was continued up to the outbreak of the Great War.[3]

Date.	Gold Reserve in Japan.	Balance in London.
Dec. 31, 1905 . . .	37 million yen	442 million yen
,, 1907 . . .	45 ,, ,,	401 ,, ,,
,, 1910 . . .	135 ,, ,,	337 ,, ,,
,, 1911 . . .	133 ,, ,,	231 ,, ,,
,, 1912 . . .	136 ,, ,,	215 ,, ,,
,, 1913 . . .	130 ,, ,,	246 ,, ,,
,, 1914 . . .	129 ,, ,,	213 ,, ,,

[1] Matsukata, *Report on the Post-bellum Financial Administration in Japan*, pp. 224–5.

[2] It should be noted that part of this foreign reserve belonged to the Japanese Government and part to the Bank of Japan, but that the relative share of each is not published, as far as the writer is aware.

[3] Gyoju Odate, *Japan's Financial Relations with the United States*, p. 29.

It will be noticed from this table that the decline in the foreign balances between 1907 and 1910 coincides with a great increase in the specie reserve held within Japan, a fact which indicates that specie was brought home doubtless to relieve the financial stringency which followed on the panic of 1907–8. Further, it will be seen that, while from 1910 to 1914 the domestic holding of specie was almost constant, the foreign balances were subject to a considerable decline in spite of the fact that several foreign loans were floated during that period to replenish them. This decline caused great uneasiness to the Japanese financial authorities.

The reasons which led Japan to convert into a permanent policy what had originally been a temporary expedient to meet the special circumstances produced by war will become evident if we examine her banking and currency system. The position of the central bank has a particularly close bearing on the problem. The Bank of Japan, which acts in very close conjunction with the Minister of Finance, has a monopoly of the country's note-issue. According to the law of its establishment, the Bank must hold, as cover, gold and silver coin and bullion equivalent in value to the notes issued, although it is provided that notes to the value of 120 million yen may be issued against certain specified securities. These notes, in the absence of a highly developed cheque currency, form the country's most important means of payment; and though they were nominally convertible into gold on demand, gold coins did not circulate to any considerable extent. From the time of the Russo-Japanese War, moreover, the foreign balances had been counted as part of the specie reserve for the note-issue, and thus Japan's currency system prior to 1914 bore a considerable resemblance to the gold exchange standard. In its relation to the money market the central bank was in a somewhat peculiar position. Although it rendered great financial assistance to the Government and to the official banks, it was not a banker's bank, and it had very little control over the activities of the numerous private financial institutions, which numbered about two thousand. Very few of these banks kept their reserves with the Bank of Japan or co-operated with it, and thus it was unable to co-ordinate the banking activities of the country and to enforce a common policy. Further, the system meant that the reserve against the note-issue was divorced from the banking reserves, and that the Bank Rate was quite powerless to affect the policy of the other banks. Such being the case, the central bank was unable to check the

undue extension of credit on the part of other financial institutions, and yet in the crises which followed such booms (as in the years 1907–8 and 1920–1) it found itself obliged to lend freely to them in order to prevent a general financial collapse. Thus, though it could not influence their policy, it had to come to their aid when that policy had landed them in difficulties. This, together with the fact that a cheque currency was as yet undeveloped and so could not be relied on as a means of meeting increased demands for payment, involved periodically vast increases in the note-issue. Legally there was no difficulty about extending it, for in times of crisis the Bank was permitted to increase its security issue beyond the statutory limit on the payment of a tax to the Government. In practice, however, if Japan had been determined to maintain a gold standard, such a situation would have involved the necessity for large imports and exports of gold periodically, which, in view of Japan's distance from the important financial centres of the world, would have been a slow and expensive undertaking. A note-issue backed to a great extent by holdings of foreign currency was obviously more suited to the financial condition of the country than an unadulterated gold standard currency. Further, the Japanese exchanges were especially liable to severe fluctuations, partly because of the Government's heavy periodical payments abroad as interest on Japan's foreign debt or for the purchase of those Western manufactures which her naval, military and industrial expansion necessitated, and partly because her chief export, raw silk, was one for which the demand varied very considerably in the world markets. The seasonal strain, too, was severe, for Japan was still largely an exporter of raw materials and agricultural produce, exports of which were naturally concentrated in the latter part of the year. Thus it would have been exceptionally difficult for Japan to prevent heavy gold exports on occasions, had no special measures been adopted. The central bank would have been quite powerless to protect its reserves by means of the mechanism of the Bank Rate, not only because of Japan's great distance from other financial centres, but also because of her position as a debtor country.

As a result of the adoption of this system of regulating the exchanges, the balance of indebtedness between Japan and the rest of the world would be settled, if adverse to Japan, not by gold exports but by sales of credits held in London, and the reduction of the exchange fund at that centre would be offset by a cancellation of notes, which would be paid into the Bank

of Japan when the exchange was purchased. Now we have seen that this system was pursued until 1914, but that the steady decline in the amount of the exchange fund had given the authorities cause for alarm. The only explanation given for this decline was the "adverse balance of trade"; but since this is itself a result rather than a cause, it is necessary to look rather more deeply into the circumstances of the time for a solution of the problem. The continuous fall in the exchange fund indicates that prices in Japan were inflated when compared with gold prices, and that forces were at work which were tending to remedy this, viz. internal purchasing power in the form of Bank of Japan notes were being exchanged for foreign credits. The fact that the movement continued for several years without any equilibrium being reached, and without Japan's price level being adjusted to that of the rest of the world, is somewhat remarkable. It caused some financiers to protest against the system of issuing notes against the foreign balances, and to demand that only specie held within the country should be counted as the currency reserve. It may be suggested, however, that the fault lay not with her method of regulating the currency, but entirely with her banking organisation. Even the existence of a gold standard pure and simple does not obviate the necessity for a strong central bank and a highly organised money market, the absence of which would, in fact, make the maintenance of a gold standard impossible for long. Similarly, Japan's version of the gold exchange standard could only have been completely satisfactory if her central bank had been able to control the creation of credit on the part of the other banks, for then alone could it have really regulated its own note-issue. Had it been able to counteract increased demands for sales of the exchange fund by raising the Bank Rate and by forcing other banks to contract credit, then the desired reduction in the amount of purchasing power would have been obtained. As we have seen, however, the undeveloped state of Japan's financial machinery made that impossible. It may be true that a gold exchange standard of any kind is less automatic and "fool-proof" than a gold standard; but it seems evident that the financial weaknesses of Japan at any rate should be ascribed not to the faults of her gold exchange standard as such, but rather to the undeveloped state of her banking system. Possibly much of the adverse criticism levelled against the gold exchange standard would be directed with more justification against the banking system of those countries in which that standard happens to exist.

The outbreak of the war completely altered the situation, as far as the foreign balances were concerned. The immediate effect, however, was to produce a depression in Japanese industry which lasted till the middle of 1915; but presently Allied orders for munitions and supplies of all kinds began to flow in, and these caused an immense change in Japan's position in the world of commerce. The statistics of her foreign trade illustrate clearly enough the tremendous readjustment of her economic life. From 1911 to 1914 the average annual excess of imports over exports amounted to 65 million yen, while from 1915 to 1918 the annual excess of exports reached an average of 352 million yen. The following table will make the position yet more clear.[1]

FOREIGN TRADE OF JAPAN, 1911–1920 (in million yen).

Year.	Exports.	Imports.	Excess.
1911	447	514	67 (import)
1912	527	619	92 ,,
1913	632	729	97 ,,
1914	591	596	5 ,,
1915	708	532	176 (export)
1916	1127	756	371 ,,
1917	1603	1036	567 ,,
1918	1962	1668	294 ,,
1919	2099	2173	74 (import)

Not only did the export of commodities increase enormously during the War, but "invisible exports" must have risen in amount to an almost equal extent. For instance, Japan extended her mercantile marine during this period and her ships began to play a much more important part in Far Eastern trade than they did before the War.

Now this industrial boom, which the requirements of the Allies had stimulated, naturally had far-reaching financial effects. For a time the greater part of Japan's foreign trade continued to be financed through London; but in 1916, when that medium ceased to be available, her balance of indebtedness was settled by means of specie shipments from the United States. As a result, the specie reserve held in Japan increased from 129 million yen in December 1914 to 228 million yen in December 1916, while her foreign balances, which had been steadily decreasing for many years, and which stood at 230 million yen in June 1914, and 213 million yen at the end of the same year, amounted

[1] *The Financial and Economic Annual of Japan,* 1910–1919.

to 487 million yen in December 1916.[1] The flow of specie into Japan from the United States continued until September 1917, when America placed an embargo on gold exports and so deprived Japan of her means of receiving payment. As a result, Japan also placed an embargo on the export of gold, and from this time onwards the balance of Allied indebtedness to her accumulated in New York. The foreign balances increased from 487 million yen in December 1916 to 725 million yen in June 1918, and to 1355 million yen in December 1919.

The financial machinery of Japan was scarcely equal to dealing with such an unexampled period of trade, and the lack of a highly centralised banking system was keenly felt. While industrial firms sought for fresh capital so that they might extend their plant and so take full advantage of the strong demand for their goods, the Yokohama Specie Bank, the official exchange bank through which a great part of Japan's foreign trade is financed, borrowed heavily from the central bank in order to finance the vastly increased exports. Unfortunately, as we have seen, the ordinary banks had no close connections with the Bank of Japan, and their funds were, in the absence of a discount market, unavailable for exchange purposes, so that during the War the central bank developed into an institution whose main function was the support of the exchange banks.[2] Its enormous loans for exchange purposes resulted in a vast increase in its note-issue. In December 1914 the issue stood at 385 million yen; it rose in December 1916 to 601 million yen, and in December 1918 to 1145 million yen, and in December 1919 to 1555 million yen. The fact that this inflation was based on increased gold holdings did not, as some financiers apparently hoped, prevent a great rise in the general level of prices.

RELATIVE PRICES AND NOTE-ISSUES (1913 figures = 100).

Year.	Prices.[3]	Note-Issue.[4]
1914	95	91 (December 31)
1915	97	101 „ „
1916	117	141 „ „
1917	149	195 „ „
1918	196	269 „ „
1919	239	365 „ „

[1] *Japan Year Book*, 1923, p. 493.

[2] *Cp.* Gyoju Odate, *Japan's Financial Relations with the United States*, Chapters II and III.

[3] *Bank of Japan's Index-Number, Monthly Average of Wholesale Prices.*

[4] Maximum Issue of the year.

Under normal circumstances the rise in prices would have checked the demand for Japanese goods on the part of foreign buyers, and this would have prevented any further increase in Japan's gold holdings. But the demand for commodities on the part of the Allied Powers was far too urgent for the normal remedy to take effect and the excess of exports continued up to the end of the War. Thus, though the effect of the War was to give Japan an unusually large favourable balance of trade, yet, inasmuch as the stimulus was temporary and artificial, the fabric of her economic life was severely strained. For five years Japan was selling without being able to buy proportionately, and she was accumulating reserves of purchasing power which she could not employ. As a result, she was left in 1919 with an enormous balance of short-term indebtedness in her favour, which has proved a source of danger to the economic life of the country.

This danger, it must be admitted, appears to have been realised by her financial authorities, and there was certainly some attempt to convert the balance of short-term indebtedness into long-period loans. But circumstances were scarcely favourable for the execution of this policy. The bonds which Japan herself had issued abroad prior to the War stood at a very high figure, and little seems to have been done to redeem them, for the foreign debt was practically the same at the end of the War as at the beginning. Up to September 1918, however, Japan had loaned 1140 million yen to the Allies;[1] but the greater part of this was in the form of short-term loans which did not, of course, remedy the situation. By December 1921 the amount outstanding of the foreign loans issued in Japan was only 454 million yen, the greater part of which consisted of advances to the Czarist Government and of the notorious Nishihara loans to China.[2] Thus, the only long-period loans of importance which Japan made during the War were to debtors from whom there is now not the slightest possibility of obtaining repayment.

We may now turn our attention towards the position of the Japanese foreign exchange rates after 1914, though our present purpose does not require more than a very brief outline of their course. The yen rose above dollar parity in November 1915, and maintained that position without a break until the end of 1919. Up to September 1917, gold exports from the United States prevented any great rise in the exchange, but after the

[1] Elisha Friedman, *International Finance and its Reorganization*, p. 44.

[2] *Japan Year Book*, 1923, pp. 490–1.

imposition of the embargo the yen appreciated considerably, rising to five per cent. above par at the end of 1917, and to ten per cent. above par in the autumn months of 1918. Owing to the special circumstances produced by the War, the exchange rate had no close connection with the relative purchasing powers of the dollar and the yen, and in the autumn of 1918, when the exchange value of the latter had reached the peak of its appreciation, the index-numbers show that the general level of prices of the United States had risen slightly less than that of Japan. As soon as the War had ceased to exercise its influence on the Japanese foreign trade, and after the removal of the American embargo on gold exports, the exchange on Japan fell slightly, and at the end of the world boom the yen was fluctuating about dollar parity.

Thus the early months of 1920 found Japan with her currency heavily inflated and with her price level, in consequence, far above the 1914 level, though not quite so much as that of Great Britain. On the other hand, although the period during which she could boast a surplus of exports came to an end in 1918, her foreign and domestic specie holdings continued to accumulate until December 1920, when they reached their maximum, viz. 2183 million yen, an increase of over 600 per cent. since 1914.

The spring of 1920 marked a turning-point in Japanese financial history. The index-number of wholesale prices reached its maximum in March of that year, when a violent economic crisis began on the silk markets of the country. Prices fell rapidly and continuously from March 1920 to April 1921, after which date there was a short period of rising prices which lasted until October of the same year, and which was followed by another period of declining (though only very slowly declining) prices. From the table given below it will be obvious that this fall in the Japanese price level was considerably less than the decline in those of England and the United States.

INDEX-NUMBERS OF WHOLESALE PRICES (1913 = 100).

Year.	Japan (Bank of Japan).	U.S.A. (Bureau of Labour).	United Kingdom (Board of Trade).
1920 . .	260	226	307
1921 . .	200	147	197
1922 . .	195	150	159
1923 [1] .	193	155	159

[1] First eight months only, *i.e.*, up to the time of the earthquake.

One might expect to find that, as the purchasing power of the Japanese unit of currency had, during the years of depressed trade, risen very much less than that of either the dollar or the pound, the dollar–yen rate would have fallen considerably below par. That, however, did not occur. During 1921–2 the exchange fluctuated round $48 to the Y100, only about three per cent. below par, while in the early months of 1923 the rate rose above $49. The rate on London was adjusted to follow the course of the Anglo-American rate; and it is curious to remark that although the index-numbers for 1922 show that British prices were about sixty per cent. above those of 1913, while Japanese prices had practically doubled, yet the Anglo-Japanese exchange throughout the year was well above par.

This brings us to the central problem of this essay, viz. the explanation of the divergence between the purchasing power parity of the yen and the dollar and the rate of exchange. It is generally admitted that the recovery in the purchasing power of the pound and the dollar has been due in no small degree to the deliberate deflation of the currency carried out by the financial authorities of Great Britain and the United States, and the fact that the purchasing power of the yen showed no comparable recovery between 1920 and 1923 can only be explained by the fact that the Japanese Government was not inclined to pursue a policy of active deflation. Without pausing to consider the wisdom of the British and American policy, we may look for a moment at the reasons which caused Japan to refrain from her usual course of following the lead of the great financial Powers. These reasons are numerous and somewhat complicated in detail, but they lie at the heart of the present economic problems of Japan.

As we have already seen, the stimulus of foreign demand during the War period had caused a vast expansion of Japan's industry and trade, which obviously could not survive the restoration of the world's normal sources of supply. That expansion had only been made possible by heavy extensions of credit on the part of the banks of the country, which found themselves in 1920 with a great part of their assets frozen and their whole situation one of extreme insecurity. Had the Government endeavoured to carry through a policy of deflation, and had it succeeded in the attempt, then banks and industrial concerns all over the country would have been brought to ruin. Financial soundness at the cost of innumerable bankruptcies and of widespread unemployment did not recommend itself as a desirable

economic policy to the Japanese Government. This was especially so since deflation is a policy more difficult to carry out in this country than in England and America, not only because of the character of the banking system, but also because of certain peculiarities in the psychology and social organisation of the people. The Japanese have proved themselves to be above all brilliant opportunists; they have little devotion to abstract principles; and, in common with other Eastern peoples, they have an intense dislike of pushing things through to a crisis, preferring to bolster up the less able units in their economic organisation rather than to destroy them in the interests of efficiency. In Japan, moreover, there is no tradition of *laisser-faire*, and the patriarchal organisation of society has by no means given place as yet to the competitive. For instance, the Japanese family, which is a much larger and more powerful organisation than its Western counterpart, is a means of providing mutual help and support on a very large scale in time of distress. It functions, during depressions, to enable the worker to live without resort to systems of Poor Relief or Insurance Schemes, and the business man to find such financial support as would not be available in Western countries. Also the custom of distributing large allowances to factory workers on dismissal is evidence of an attitude of mind different from that found in Europe or America. It appears, then, that the Japanese have a strong sense of social solidarity and that they have by no means acquired the Western individualistic outlook. It will be readily understood, therefore, that a policy of deflation and the social consequences which a rapid readjustment of values involves are not likely to be looked upon with favour in this country, nor easy to carry out. Further, it should not be forgotten that a large part of the modern industrial and commercial enterprise of Japan is in the hands of a few great business families, whose interests are wide enough to embrace almost every kind of economic activity, including banking. Thus there is not the same clear-cut division between financial and industrial interests in Japan as in England, and some of the greatest joint-stock banks of the country, such as the Mitsui and the Mitsubishi, represent only one part of the business activities of those houses. It is obvious that the attitude of such firms towards the country's financial policy would be determined by industrial rather than by purely financial factors, and that the weight of their influence (which is considerable) would be thrown against any policy which might intensify the industrial depression. It is indeed

in the banking organisation that we must look for what is probably the most important reason for the slowness of deflation in Japan. Even if the Government had decided to adopt a deflationary policy, it is extremely doubtful whether, in view of the weakness of the central bank, there would have been sufficient co-operation among the financial institutions of the country to make such a policy effective. For instance, during the past few years repeated protests have come from high officials against the practice of the ordinary banks of advancing loans on the security of real estate and other fixed assets, on the ground that such transactions should be left to the semi-official Industrial and Hypothec Banks which were formed especially for that purpose. Such protests have been apparently quite ineffective in preventing the smaller joint stock banks from accumulating assets which are impossible to realise in times of financial difficulty. Although unable to control the extension of credit on the part of the other banks during the boom period, the Bank of Japan has been obliged on several occasions since 1920 to make huge advances to them in order to avoid a panic. These advances, together with the loans at low rates of interest which the central bank has made to maintain the solvency of semi-official enterprises, and the frequent issues of short-term bonds by the Government, have naturally impeded the deflationary movement. At the end of 1922 the note-issue stood at 1590 million yen, a figure higher than any that was reached even at the height of the boom.

Having described some of the factors which have worked against deflation in this country, we must now explain how it was that, in spite of the growing divergence between the price levels of Japan and the United States, the exchange remained as high as $48 during 1921–2 and rose within a few cents of par in 1923. The only explanation which fits the facts is that the external purchasing power of the yen was maintained high above its internal value by the release of the foreign balances which had been accumulated as a result of the export surplus during the War. The exchange was, in fact, " pegged " at a figure well above the purchasing power parity of two currencies, and the " spread " between the two values, which was comparatively slight at first, has increased gradually since 1920 as a result of the fall in prices in the United States. This over-valuation of the yen abroad has put a premium on imports, while severely handicapping the exporter. As a result, the export surplus of the War years gave place to an import surplus of even greater dimensions.

Year.[1]	Imports. (In million yen.)	Exports. (In million yen.)	Excess of Imports. (In million yen.)
1919 . . .	2,173	2,099	74
1920 . . .	2,336	1,948	388
1921 . . .	1,614	1,253	361
1922 . . .	1,890	1,638	252
1923 . . .	1,987	1,448	539

The adverse trade balance would probably have been even greater in 1922 had not the Government through the Yokohama Specie Bank endeavoured to counteract the stimulus which the exchange gave to importers by restricting credits for imports which were not regarded as necessaries.

The steady decline in the foreign specie holdings of the Government and the Bank of Japan testify to the validity of the above explanation.

Date.[2]	Total Amount of Specie. (In million yen.)	Held Abroad. (In million yen.)
Dec. 1920 . .	2,183	1,076
„ 1921 . .	2,080	855
„ 1922 . .	1,830	615
Aug. 1923 . .	1,780	576
Dec. 1923 . .	1,653	445

The embargo on the export of gold has been maintained up to the present time by the Japanese Government in spite of the protests of those who desired an even higher exchange. Indeed, the lifting of the embargo and an attempt to maintain a free gold market would have been extremely unwise. Had the embargo been raised in 1919, when the United States took that step, the result would have been to tie the internal as well as the external value of the yen to that of the dollar, and to force on the Japanese Government a policy of deflation which, as we have seen, would have been very difficult to carry out, and which would in all probability have produced a financial panic of unparalleled severity. Naturally the objections to the lifting of the embargo have increased in force as the difference between the price levels of Japan and the United States have become more pronounced. The Government was unwilling to take the opposite course of allowing the exchange value of the yen to fall to its natural level, which would have been the wisest policy, partly no doubt

[1] Cp. *Report of the Department of Overseas Trade on Japan*, 1922–1923.

[2] *The Japan Year Book*, 1923, p. 493; and *The Japan Weekly Chronicle*, Jan. 24, 1924, p. 29 (*Commercial Supplement*).

for fear of damaging the financial prestige of the nation, and partly out of a desire to make use of its foreign balances. Thus the exchange was maintained at an arbitrary figure which bore no relation to the domestic purchasing power of the currency; and Japan's international trade was in consequence gravely disturbed.

How long this policy might have continued, and the results of it in the long run, it is now impossible to say, since it was brought to an end by an incident which no statesman could possibly foresee. The Japanese financial authorities may have hoped that a revival of trade in England and America would bring the deflationary period to an end and would cause a rise in prices in those countries sufficient to raise the purchasing power of the Japanese currency to the level of its artificially maintained exchange value before the foreign balances were exhausted. The more probable explanation is, however, that the Government preferred to temporise and to await the final settlement of the European economic situation (which would affect enormously the value of gold) before committing itself to any decisive policy.

Unfortunately the earthquake of September 1st, 1923, which destroyed the chief port and a great part of the capital, had the effect of reducing temporarily the productive resources of the nation, and of necessitating the importation of an enormous quantity of reconstruction materials. In consequence, the foreign balances were rapidly depleted, and it was no longer possible to maintain the exchange at its artificial high level. By the end of the year the exchange was already weakening, and though the Government placed difficulties in the way of financing imports of what were regarded as luxuries, the yen declined rapidly to $43 in January 1924. It was argued by many who had not realised the true situation that the yen would recover after the period of free imports had come to an end on March 31st, 1924, and that the foreign loans raised in England and America in the spring of that year would restore the balance of specie held abroad to an adequate amount. But the proceeds of the loans have been required largely for the repayment of foreign debts which have fallen due during the year, and for purchases of reconstruction materials. Thus the fact that the exchange funds were approaching exhaustion forced the financial authorities to abandon their policy of supporting the exchange, which has steadily declined throughout the year till at the time of writing (November 1924) it stands at $38½. This, it should be

noted, is at the height of the export season, when trade influences are in Japan's favour, and when the depreciation can no longer be ascribed to the necessity of paying for vast quantities of reconstruction materials. It is possible that the exchange will depreciate still further when the favourable seasonal influences are removed, for there are no signs of any deflation of the currency, and the Japan–American exchange is still above the purchasing power parity of the two currencies. The following table indicates the divergence within recent years between the exchange rate and purchasing power parity.

PURCHASING POWER PARITY AND EXCHANGE VALUE.

Date.	Index-Numbers Base year 1913.		Purchasing Power % of 1913 p.p.		Purchasing Power % of $ p.p.	Actual Exchange % of $ Parity.
	Japan.[1]	U.S.A.[2]	Japan.	U.S.A.		
1921	200	147	50·0	68·0	74	97
1922	195	150	51·3	66·7	77	97
1923						
(Jan.–Aug.)	193	155	51·8	64·5	80	98
Sept.	210	154	47·6	64·9	73	97
Nov.	210	152	47·6	65·8	72	98
1924						
Jan.	211	151	47·4	66·2	72	91
May	205	147	48·8	68·0	72	82
July	195	147	51·3	68·0	75	83
Aug.	200	150	50·0	66·7	75	83
Nov. } Dec. }	Not available at time of writing.					78

For reasons which need not here be discussed, a *very* close correspondence between the exchange and the purchasing power parity is not to be expected; but it should be noted that, had retail prices been compared, the divergence would have been much greater owing to the fact that retail prices lag behind wholesale prices to a much greater extent in Japan than in America.

It should be noted that Japan still possesses a considerable specie reserve, for at the time of writing (November 1924), while the note-issue stands at a little over 1200 million yen, the gold held in the country amounts to 1060 million yen, and the specie abroad is estimated at 400 million yen. Yet in view of the impossibility of lifting the embargo on gold exports until the price levels of Japan and the United States approximate, the

[1] *The Bank of Japan's Index-Numbers.*
[2] *Bureau of Labour's Index-Numbers.*

reserve is "immobilised," and must be regarded more as a reserve for emergencies than as having any intimate connection with the currency. Gold may be exported, or part of the foreign balances may be released, to prevent sudden slumps in the value of the yen, due to a loss of confidence, when the seasonal influences move against Japan in the early months of next year (1925); but free gold movements are obviously out of the question for a considerable time to come.

Now that Japan's currency history has been brought up to date, its main features and the inferences which the present writer has drawn from it may be very briefly summarised. Soon after her adoption of the gold standard Japan was forced to experiment with a system of exchange and currency regulation which was in reality a version of the gold exchange standard. This, as we have seen, was not a complete success before 1914, largely owing to certain defects in her banking organisation; and difficulty was experienced in maintaining at a satisfactory figure the foreign balances, which are an essential feature of that standard. The special circumstances in which Japan was placed during the European War, however, resulted in an enormous increase in her specie reserves, especially in that part which was held abroad, and at the same time gave an enormous stimulus to her economic development, which caused the world to over-estimate her financial and industrial strength. Partly owing to certain peculiarities of her social organisation, and partly as a result of her defective financial machinery, she has been unable to make a rapid readjustment of her industries and finances to meet the requirements of post-war conditions, and her price level has remained far above those of Great Britain and the United States. That in itself would not have been a very serious matter, if it had not been for the fact that her accumulated gold holdings were used to maintain an artificial divergence between the external and internal values of her currency. While such a divergence continued, a reorganisation of her industry and commerce on sound and stable lines was impossible; yet the suddenness of the fall of the exchange value of the yen to within a few points of its purchasing power parity during the last few months has given a severe shock to the economic life of the country and to the national credit. As we have seen, this fall was accelerated, not caused, by the earthquake. Thus, largely because of her mistaken financial policy, this country has lost a great deal of the headway which she made as a result of the artificial stimulus of the War; and because

those measures which were deemed necessary to restore soundness to the economic structure of England and America have been postponed by Japan, she sees herself now obliged to face the ordeal of financial readjustment through which her two chief competitors have already passed.

The recent financial history of the country seems to point to the fact that, while some form of the gold exchange standard is more suited to Japan than a gold standard, yet it has many grave dangers when unaccompanied by a banking system which makes possible a centralised control over the creation of credit. Japan unfortunately lacks a centralised and efficient banking system; and it is the opinion of the present writer that a great many of her economic troubles are to be attributed to that fact. Indeed, the existence of such a banking system is a necessary condition of any successful currency and exchange policy, and the means of creating it certainly merits some of the attention which the Japanese financial authorities have recently been bestowing on what seems to have become in the modern world the conventional remedy for all diseases of the body economic, viz. higher tariffs.

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Nagoya, Japan.

REVIEWS

Principles of Railway Transportation. By ELIOT JONES, Ph.D., Professor of Economics in Stanford University. (New York: Macmillan Company. 1924. Pp. 607.)

THIS is a careful and valuable piece of work by an eminently fair-minded writer. It is a complete and well-documented history of the public relations of the railways of the United States. But the English reader should not be led by the title to expect to find a discussion of economic theory. Only a hundred pages of the whole book—Chapter IV, the Theory of Railway Rates—are concerned with theory. And even here references to non-American writers, and non-American problems and their solution, are conspicuous by their absence. Indeed the author's lack of familiarity with—or at least interest in—the railways of other countries is evident throughout. In the useful bibliography appended to the separate chapters there is hardly one single non-American writer mentioned. Where in the text the author does deal with non-American experience, he refers to American writers as his authorities. Even English railway practice and history seem to be outside his studies. For instance, it will be interesting to the English railway staff, as they turn to their well-thumbed copies of the Railway Rule Book and the Appendix to the Working Time Tables, to have learnt that "in England the operating rules of the railways, when approved by the Government, become the law of the land." Again, "equipment that was sorely needed at home was sent abroad to France, England and Russia." Presumably the rolling-stock supplied to this country was employed to carry abroad the phantom Russian battalions of 1914. Once more, "having taken possession of the railroads under his War powers, it was necessary for the President to create an organisation to operate the roads." Professor Jones assumes the necessity. In view of the fact that the English railways had been possessed for over three years by our Government, but had continued to be operated wholly by their own organisations, without the superposition of even a skeleton Government organisation, it would have been interesting to have had the necessity of the President's action explained.

To turn from what the author has not done to that which

he has. Nowhere probably will the American student, approaching the railway question from a practical standpoint, find a book equally well suited to his requirements. There is a financial introduction, explaining the nature of railway securities and their gradations all the way down from underlying first mortgage bond to "common" stock—for American railways have not yet risen to the height of issuing "deferred ordinary." There is further a chapter on "receiverships," which, though the subject is fortunately of small practical importance here, shows that in this instance at least American railway law is much superior to our own in protecting the rights not only of creditors but of shareholders and the public. There is also a historical introduction giving in a few pages an admirable summary of railway development, decade by decade, from the humble beginnings in the thirties to the full-grown system at the end of the century.

The main portion of the book deals, always from the historical rather than from the theoretical point of view, with the perennial questions of competition, discrimination, classification and rate schedules. There is a lucid description of the Trunk Line system of rates on the Chicago basis—perhaps the most successful application in the world of something approaching equal mileage rates; of the Southern system of basing points; and of the long controversy, not yet ended, as to Inter-mountain rates. Those who believe that equal mileage rates are not only abstractly just but practically enforceable, may be interested to learn that at one time the rates from stations east of the Missouri to Denver (say 700 miles) were higher for similar consignments than from New York to the Pacific Coast (say 3000 miles), and that after exhaustive investigation the Interstate Commerce Commission in 1911 refused to order any substantial alteration. The plain man may be forgiven—especially when he has traffic to send from the Missouri to Denver—for thinking that, if the railroad can afford to carry from New York to San Francisco for x dollars, it must be making an extortionate profit when it charges him more for one-fourth of the distance. But when his representative in Congress butts in to redress by cast-iron legislation the imagined wrong, it does not necessarily redound to the public weal.

Perhaps the most valuable portion of the book is to be found in the series of chapters tracing the development of legislative regulation from its beginning about 1870 in the separate States, then taken up in 1887 by Congress, and gradually passing more and more, and latterly almost exclusively, but not without bitter opposition, into the hands of the Federal Government. In the

result the railroads of the United States are to-day undoubtedly the most regulated railways in the world, but few people would be found to add "the best regulated." And this leads me to appeal, not for the first time, to the economists of the United States to abandon in their writings on railways a too lavish use of the tense which grammarians call the historic present. Regulation in America has run riot, to the injury not only of the railway shareholders, but of their customers. To give but one instance. During the last ten years the miles of railway open for public use have been reduced by ten thousand. And meanwhile the population of the country has increased by ten millions, and freight traffic has increased 35 per cent. The main reason is that the average voter still desires to visit the sins of the fathers upon the children: he believes that railway capital is largely water, and believes that secret rebates, personal discrimination, and all the other malpractices of former times still persist. And for this belief the writings of the academical economists are largely responsible. It is time that the public should be told by those whom they naturally believe to be skilled and rightly believe to be impartial that bygones have long been bygones.

That an academic writer should tend to project the shadow of the past too far forward into the present is only natural. Writing from the outside, he relies largely for his facts on official sources, Reports of Committees of legislative bodies, judgments of Law Courts, and the like. But these reports and judgments in the nature of things represent investigations of conditions that may have passed away before they were issued. Further, their date of issue may be a good many years previous to the time when the academic writer quotes them. For the probably inevitable result that the past is described as though it were the present, the careful reader makes due allowance. But for the benefit of the non-careful reader the writer who desires to be fair should at least avoid the use of the historic present, unless he has reason to believe that past conditions still persist. I have marked in perusing this book scores of illustrations of the point I desire to make. Space does not permit of mention of more than a few of them. The whole chapter on "Personal Discrimination" would in my judgment lead the average reader to believe that the discreditable condition of things described still persists to-day. Indeed the author writes: "No doubt there are still some rebating devices in use, yet the situation is much improved." But in fact he produces no modern instance. His authorities are mostly not less than twenty years ago. The reason for the improvement

is, we are told, that "the railroad officials have learned by bitter experience the serious losses that rebating entails," and that "the moral sense of the shipper has also undoubtedly improved, and many shippers will no longer accept rebates." One would have expected to have had instances given of cases where the apparently a-moral railroad men assaulted in vain the moral shipper. The only positive evidence produced as to the morality of the shipper is to be found in a quotation on p. 120 from the Report of the Industrial Commission to the effect that the Commissioner of a railroad Traffic Association testified that "in 1908 the west-bound inspection bureau of the trunk lines from Boston, New York, and Philadelphia discovered 270,000 misrepresentations by shippers of the contents of the packages offered to the railroads for transportation": in other words, 270,000 attempts by traders to defraud the railways of their just receipts. Let me repeat that I am quite sure Professor Jones desires to be fair. He writes, for instance: "It must not be supposed that the railroads are *solely* [my italics] to blame for the existence of personal discrimination . . . a shipper may become so strong that he can dictate to the railroads . . . and none of them can afford to stand against the industrial giant that they have created." To quote again: "personal discrimination also arises from an abuse of trust on the part of railroad directors and officials." The two questions I desire to ask are: (1) Is the use of the present tense justified? and (2) Is the position of a person, even though he be a railway official, who, when a pistol is held to his head, surrenders something that he is morally bound not to surrender, adequately characterised as "not solely responsible"?

I will add another question. The author speaks as though the abolition, or, as he would say, the great reduction of the abuses connected with rebates and free passes given as bribes were wholly the result of action by legislatures and commissions. Would he dispute the statement that the courageous action of Mr. Cassatt, then President of the great Pennsylvania Railroad, who announced before the passage of the Elkins Act that any official of his railroad found to have given a rebate would be instantly dismissed, and who put an end to the abuse of free passes while they were still not illegal, had as much, if not more, to do with putting an end to rebates and pass bribery as the action of any legislature or any Railroad Commission?

Let me give two more instances before I leave the subject. "Many railroad executives held the view, which a few were bold and foolish enough to express, that the 'public be damned.'"

Was any railroad executive, except Mr. W. K. Vanderbilt, ever accused of the boldness and folly of expressing this view? Is Professor Jones unaware that the late Mr. Allen, for many years secretary to the Railroad Association, published evidence apparently sufficient to prove that Mr. Vanderbilt never used this expression? His account of the origin of the story was that a newspaper reporter, being refused admission to Mr. Vanderbilt's sleeping car in the station at Chicago at three o'clock in the morning, avenged himself by inventing an interview that never took place. On p. 504 Professor Jones writes that "the average rate of dividend on all stock was only $4\frac{1}{2}$ per cent. during 1911 to 1921. To what extent the stock, including much water, was entitled to dividends, it is impossible to say." Two observations suggest themselves. The doctrine that "watered" stock, that is, stock issued at less than its par value, or even without payment as a bonus to purchasers of bonds, as representing future possibilities, is not entitled to dividends when earned, has hitherto been confined to American railroads. The German Government recently issued a loan at 92, which has since gone to par. Are the American holders of these bonds prepared to accept the doctrine that the 8 per cent. is "water" on which the German Government have no moral obligation to pay interest?

There is a further question whether the stock does include much water to-day, whatever may have been the case a generation back. In 1921 the Interstate Commerce Commission, which does not usually stretch points in favour of the railroads, came to the conclusion that at least nine-tenths of the nominal capitalisation of the railroads of the United States represented cash investment. The detailed valuations of the different railroads which have been issued since then already suffice to make it clear that, when all the valuations are completed, the capital investment will be found to be not less but greater than the nominal capitalisation.

Lest it should appear that any charge of conscious bias is brought against the author, I desire to repeat once more that, except for his use of the historic present in reference to railway delinquencies, the author is eminently fair. Nowhere can be found a more judicial summing up of the case for and against State ownership. One might perhaps wish that in stressing the success of State ownership in pre-war Prussia he had called attention to the wise words of a great American, Charles Francis Adams: "A country with a weak or unstable executive, or a crude and imperfect Civil Service, should accept with caution results achieved under a government of Bureaus." One other instance

of the author's judicial attitude may be given. It is commonly believed in America that the great grants of public land given to the railroads in the early days represent an out-of-pocket contribution by the Government for which the railroads ought to make payment in the form of lower rates. Here is the author's account of the matter. In September 1850, " Congress gave away the alternate even-numbered sections for six miles on each side of the projected road, retaining for its own benefit the odd-numbered sections. The Government really gave up nothing, since the construction of the railroad improved the market for the odd-numbered sections, the price of which was immediately advanced to double the former figure."

W. M. ACWORTH

The Business of Railway Transportation. By PROFESSOR LEWIS H. HANEY, Ph.D. (New York: Ronald Press. 1924. Pp. x + 613.)

To the present reviewer the most interesting point in this book is that it is the second substantial volume on railway economics by a professor of economics at an important university in the United States which has reached the JOURNAL within the space of a few weeks. The latest book by an English economist of recognised standing dealing with the subject on a similar scale is that by Professor Lardner. It was published in 1850.

It is true that the railways of the United States have a length of 250,000 miles, a capitalisation of £4000 millions, and employ nearly two million men, and that the railways of Great Britain are by their side only a small concern. But the railways of the British Empire, together with those in Argentina and other foreign countries built and managed by Englishmen and Scotsmen, are comparable in importance in all three respects. And it is to Great Britain that the railway men of the Empire naturally look for professional literature. On the engineering side they are adequately catered for; on the economic side they are thrown back upon American books, dealing with a currency and using technical terms which are strange to them, and assuming an acquaintance with political, geographical and commercial conditions which they naturally do not possess.

Professor Haney deals with the business of railway transportation—defining " transportation " somewhat arbitrarily as meaning " the regular movement of goods or persons from one point to another by some system of conveyance operating on a

large scale "—under the three heads of traffic, rates and regulation. And he states his aim as to " present a practical discussion of those matters pertaining to the railway business which particularly concern shippers (traders) and traffic men," while not neglecting the investor and the thoughtful citizen. Writing from this point of view he devotes to the theory of railway rates the comparatively brief space of fifty pages. He deals as summarily as they deserve with what he characterises as " false or incomplete theories," cost of service theory, distance theory, postage stamp theory; and only less summarily with the theory embodied in the phrase, " what the traffic can bear." This phrase, he says, " covers a group of hazy ideas, tends to obscure the issue . . . and begs the whole question." Those who have been accustomed to think that the phrase best expresses the true theory may be forgiven for suggesting that five short words would need to be of a portentously portmanteau nature if they were to be adequate to embody all the limitations and implications of the principle.

The author goes on to set out " *a* true theory of rates." Should it not be " *the* true theory," or is there more than one true theory? Some of his statements—to quote but one instance—are surely inaccurate:

> " The problem of the general level of rates is concerned with total operating expenses, while in the case of the particular rates the only immediate consideration is the particular cost of the particular service performed in transporting some particular commodity."

Is this so? When a railway goods manager is fixing a rate for, say, worsted cloth, does he not, in view of the fact that the maximum possible rates for, say, hay or light iron scrap will certainly be inadequate to cover their aliquot share of the joint costs, take into immediate consideration not only the specific cost of transporting the cloth, but the share of the joint costs of the hay and the scrap which the cloth can be fairly made to bear? And will not every Rates Tribunal in the world say that he has done right?

Professor Haney's " true theory of railway rates " may be very briefly summarised as follows:—" The most practical, expedient and economic railway rates are those which would be established by competition if competition could work effectively in railway business." The marginal demand price and the marginal supply price of the service should be ascertained, and

when they are in equilibrium, the true economic rate is established. Demand price depends mainly upon the intrinsic value of the commodity, but may also be seriously affected by its perishable nature and by the competition of other means of transport. Milk is at one end of the scale, salt and cement at the other. The equation of the two prices can be approximately fixed by falling back on the element of truth in the maxim of "what the traffic will bear." And this can best be determined by comparison with other comparable rates whose reasonableness is unchallenged.

There seems no objection to describing this as the true theory of railway rates, provided one is permitted to add that it is the old theory, normally applied by railway goods managers and Rates Tribunals, even though they may cherish the "hazy idea" that they are trying to ascertain "what the traffic will bear." One feels inclined to agree with Gretchen,

> "Das ist alles recht schön und gut;
> Ungefähr sagt das der Pfarrer auch,
> Nur mit ein bischen anderen Worten."

To turn from the theoretical to the practical portion of the book. It seems very well designed in the main for the use of the class of persons for which it is intended. And this is especially true of the Parts dealing with Organisation and Functions and Railway Geography. Indeed the officials in the Goods Manager's Department on an English railway might find many valuable suggestions in it, both as to what to do and what to avoid. One may, however, be permitted to doubt whether in the Parts on Railway Rates in Practice and on Freight Traffic Arrangements the author has not given more detail than the average layman can be expected to digest. The layman might have carried away more of the essentials had he been given less of the accidentals to carry.

One refreshing feature of the book is Professor Haney's attitude of fairness towards the railways; his condemnation, for instance, of the people who claim to obtain railway service without paying the price, and his outspoken criticism of the State Railway Commissions, which by insisting upon local control of national problems add to complication, expense and delay; which, in fact, nowadays largely exist in order to secure, so far as the Federal Law permits, an unfair advantage for the traders in their own State over those on the other side of the State boundary. Part VI, Government Regulation, which concludes the book, is throughout admirable both for its judicial

tone and for its frank utterance of well-considered, though perhaps not popular opinions.

But even Professor Haney cannot always get away from the American atmosphere. Railway rates, he says, should be sufficient to pay a reasonable return on the capital invested in "railways which are honestly and wisely built." Could any great concern with a history going back two or three generations pass this test unscathed? Some eighty years ago the Great Northern capital was inflated by £300,000 through the forgery of one of its officials. The Kilsby Tunnel nearly broke the London and Birmingham, because Robert Stephenson, the first engineer of his day, was unwise enough to drive into a quicksand when he might have followed the route of the present relief line and gone round the hill. Can anyone imagine our own Rates Tribunal disallowing for rate-fixing purposes the capital that in these cases was dishonestly or unwisely spent? Again, under American law a railway company may not refund an obvious and admitted over-charge without the express permission of the Interstate Commerce Commission. "Such authority," says the author, "is necessary in order to prevent rebating under the guise of settlement for over-charges." It may have been necessary twenty-five years ago. Is it necessary to-day?

In conclusion, may the reviewer express a hope that before another seventy-five years have elapsed some English economist of standing will follow in the steps of Dr. Lardner, and write a book on railway economics, with the same thorough knowledge and grasp of his subject as is displayed by Professor Haney.

W. M. ACWORTH

The Disinherited Family. By ELEANOR F. RATHBONE. (London: Edward Arnold & Co. 1924. Pp. xii + 324. Price 7*s.* 6*d.*)

MISS RATHBONE'S "plea for the endowment of the family"—a proposal with which, as readers of the JOURNAL are doubtless aware,[1] her name is especially associated—is divided into two parts. In Part I ("The Present Economic Status of the Family") she offers a penetrating analysis of the doctrine of the "living wage" and of the circumstances under which it has come into existence, and follows this up with a devastating criticism of the social consequences of its acceptance. In Part II

[1] See ECONOMIC JOURNAL, Vol. XXVII. pp. 55 *et seq.*, and Vol. XXX. pp. 550 *et seq.*

("The Restitution of the Family") she sketches the lines along which the remedy of the Family Allowance can be put into operation, illustrates her argument with an account of the practical experience of Australia and of those European countries in which relevant experiments are in progress, and presents a forceful and spirited reply to adverse criticism. And this she states very fairly. We know of no work which, frankly propagandist as regards its main thesis, examines the "case of the opposition" with sweeter reasonableness, or which appears more determined to elicit, from the system which it indicts, what little there is to be said in the latter's defence.

The doctrine of the "living wage" has grown up, Miss Rathbone urges, in comparatively recent times, in response to the quickening of an uneasy social conscience, the revelations of sociologists, and the pressure of organised labour. And the tacit assumption that this living wage must be a wage susceptible of supporting a normal family (consisting of husband, wife and three children) has grown up with it, and has gained widespread acceptance. Yet this assumption—that the representative wage-earner has a wife and three children to provide for—is fantastically remote from the true facts (the relevant statistical material is admirably presented), and its social consequences are correspondingly disastrous. It results in a distribution of wage-earners' incomes grotesquely disproportionate to individual needs, in a squandering upon unnecessary, and often undesirable, objects, by bachelors and by the childless, of the means which a blundering social order is intending to devote to their "phantom" wives and children, and, consequently, in a measure of avoidable suffering for the dependents of those who are really husbands and fathers that is a reproach to our humanity and a standing menace to social welfare. It produces, in place of that technique of motherhood which is ideally attainable, one so wasteful of energy, so crabbed of outlook, so devoid of hope or of purpose, as largely to destroy the happiness of the mother and the potential well-being of the child. And it serves, incidentally, to depress the woman wage-earner and to foster sex-antagonism in industry, thanks to the "conviction" which it creates "that men have a right to all the best-paid jobs," fortified by the fear "that women . . . will be forced to take less, and so will undercut men." "Equal pay for equal work" must remain, in Miss Rathbone's view, impracticable and even meaningless, while the existing confusion of motives underlies the facts of wage-determination.

And the remedy? What but an overhauling of the wage-system, so as to take into account, not only the value of the work which the individual wage-earner contributes, but his needs as husband and father? But perhaps this is not putting it quite fairly. It is not *his* needs but *their* needs for the satisfaction of which Miss Rathbone pleads so eloquently. The right of the wife and mother to some recognition of the services she renders, the right of the child to a decent upbringing—it is these which she is seeking to maintain. The social income available may, through the machinery of Family Endowment, be directed into those channels where there is most need of it; and thus may a given totality of wealth be made to produce proportionately increasing welfare. In Part I Miss Rathbone aims at showing, by a method of exhaustion, that to Family Endowment there is no practicable alternative; in Part II she reviews the administrative methods already devised to make its operation possible. The best known of these, and perhaps the most instructive, are the *Caisses de Compensation* now functioning in France.

So much by way of summary. But no summary can do justice either to the strength of Miss Rathbone's case or to the manner of its presentation. Her plea for the disinherited is put forward with earnestness, with tolerance, with a restrained and clarifying wit. The weapons of intelligent advocacy, indeed, are all hers to command. She allows neither her passionate indignation with the muddleheadedness that spells social misery, nor the mockery to which she is tempted by the folly and selfishness of man, to carry her away. She remains calm, in the confidence that the logic of circumstance is with her. And the book before us will, we are certain, be increasingly read and discussed. It is a contribution of enduring importance to one of the major issues of our time.

And now we would reconsider a moment the possible lines of adverse criticism which Miss Rathbone foreshadows. She bases the "case of the opposition" upon (*a*) the fear of overpopulation, (*b*) the fear of weakening parental responsibility, (*c*) the fear of lowering wages, (*d*) the fear of increasing the burden on industry, and (*e*) the "Turk complex." (Does she, we wonder, remember *Diana of the Crossways* and the aphorism about rounding Seraglio Point? Man has not yet doubled Cape Turk; *that is certain.*) We agree also with Miss Rathbone that the endowment of the family—within such modest limits as are likely to be practicable—ought not to encourage over-

population. The available evidence, both economic and physiological, seems to point the other way. But as regards the other difficulties which tend to obstruct the acceptance of the principle, there is perhaps more to be said.

It seems to us that the purely economic arguments for Family Endowment demand more elaborate analysis than Miss Rathbone is able to give them. That the balance of economic advantage lies with the proposals she presents we are not prepared to deny. But whether this balance of advantage is sufficient to outweigh the objections of which she herself offers so able a summary is not so clear. Her suggestions may be criticised, we think, along the following lines. (*a*) How far is there a "diffusion" of the incomes of bachelors and of the childless among other classes of wage-earners, *e.g.* through the machinery of indirect taxation, which serves to swell the total amount available for the State's expenditure upon social services? The net value of the "perquisites" which are squandered at the expense of the disinherited is certainly less than appears in a preliminary analysis. (*b*) How far is it equally (or more) possible, or equally (or more) desirable to attempt the re-distribution of income through the medium of taxation? It is curious that Miss Rathbone makes no mention of the very considerable discrimination in favour of the husband and father afforded by our Income Tax Acts. The salaried worker earning £300 a year, and supporting a wife and three children, is nearly 6*s*. a week better off than the bachelor in a similar position. And where their respective incomes are £500, the weekly difference is nearly 12*s*. Here is a method that has considerable flexibility, and some advantages over the plan of positive provision. It hardly touches the wage-earner, it is true; but the direct taxation of the wage-earner is not an administrative impossibility, and might be more acceptable than the enforcement of differential wages. (*c*) What would be the real incidence of the contributions imposed under a scheme of Family Endowment? In so far as they are paid by the employer, would they fall on profits or on wages? And if on profits, how far would they impose a check to saving, and how far a check to luxury expenditure? These are questions that cannot be answered offhand, but the validity of Miss Rathbone's contentions depends to some extent upon what the answers are.

And there is one further consideration that raises a doubt in our minds. We cannot help feeling that to enforce a re-distribution of income within a limited group (that of the wage-earners), on grounds of social expediency, is not quite as just

as it looks. If it is wrong that the wage-earning bachelor should spend money on beer and betting while his neighbour's child goes underfed or ill-shod, how much more is it wrong that luxury expenditure among non-wage-earners should persist on its present-day scale? A society that spends what ours spends on drink, racing, motoring, golf, and luxuries ought not to treat the standard of life of its wage-earners as a matter mainly for themselves, and for this reason we think it possible that the right machinery may be something of more general applicability, *e.g.* a more comprehensive scheme of direct taxation.

Nevertheless, we should welcome voluntary experiments on the lines of Miss Rathbone's proposals; there are many suitable fields in which a beginning might be made. At a moment when its whole scheme of agreed salaries appears to be in the melting-pot, might we commend the idea to the teaching profession as one well worth exploring? It is just possible that there is scope there for a scheme which will meet the widely diverging views of the men and women teachers, of the L.E.A.'s, and of the State.

May we, in concluding, congratulate Miss Rathbone wholeheartedly on the book? Few contemporary writers have done as much as she has done here to focus our minds upon fundamentals. In a twilight of irresolution and doubt the principle for which she stands looms up

> Armed at all points exactly, cap-à-pie,

like the vision which presented itself to the watchers at Elsinore. Whether it be a spirit of health or goblin damned, we leave it to our economic Hamlets to determine. Miss Rathbone's appeal, no doubt, is less to Hamlet than to Fortinbras—she would have more use, on the whole, for the man of action. And in this we believe her to be right.

H. PHILLIPS.

The Problem of Business Forecasting. Edited by WARREN M. PERSONS, WILLIAM TRUFANT FOSTER, and ALBERT J. HETTINGER, Jr. (Published by Houghton Mifflin Company for the Pollak Foundation for Economic Research. The Riverside Press, Cambridge, 1924. Pp. 317.)

THERE are more than twenty-seven contributors to this collection of papers, originally presented at a three-days' session of the American Statistical Association, December 1923. The first four essays relate to the general problem of forecasting, and

most of the others to applications to particular industries. An important addition to knowledge of economic facts is made in the systematic review of statistics relevant to these industries, many of which are not available elsewhere; but most readers will find the main interest of the book in consideration of the general question whether forecasting is likely to be purely empirical or whether the deeper causes of progress and fluctuation can be discovered and observed.

There is no doubt that the presentation and analysis of statistics are, for those who can relate them to their own business experience, of first importance in forming plans for future production; but it remains doubtful if the "business cycle," on which the so-called scientific forecasts are based, denotes any normal movement, which can be brought within the scope of regular or mathematical laws, so that it is possible to tell its phase at any time. Professor Persons in the introductory chapter makes no extravagant claim in this direction; he is rather concerned to show that "the view that the mathematical theory of probability provides a method of statistical induction or aids in the specific problem of forecasting economic conditions . . . is wholly untenable." "Any past period that we select for study is, in fact, a special period with characteristics distinguishing it from other periods, and is not 'random' with respect to the present. We must, therefore, discard statistical probability and, in any year, arrive at a forecast for the following year on another basis." "Reasonable forecasts of economic developments can only be made by application of the usual methods of argument." "The probabilities of the economic statistician . . . are . . . non-numerical statements of the conclusions of inductive arguments." Here the author stops abruptly, and we are left to find examples of "the usual methods" in the subsequent studies. For example, in Mr. Prescott's study of automobile production. There has been a fairly regular growth from 1909 to 1923, which is represented by the Gompertz mortality curve, with a strong annual seasonal fluctuation. Sales have received an impetus from the development of the system of payment by instalments. Sales are compared with the production of pig-iron and a general index of the volume of manufacture. Then abruptly we are told that it seems probable that the production of passenger cars will fall between 2,700,000 and 3,000,000. In this case it is evident that dependence is rather on general knowledge of the industry than on the theory of trade cycles.

In the last chapter Mr. Hardy gives an "Example of Business Forecasting" applicable to 1924. In this he reviews the course of events of 1923, classifies the many available indices as favourable or unfavourable, decides that the trend is downwards, and will continue so for six months. He proceeds to call this a "short-run view" (p. 309) and says that the future depends on the development of the European situation. His whole statement has been in a large measure justified. Our general conclusion is, that by a study of the dominant factors, in the light of past history and by observation with the help of carefully analysed statistics of recent movements, the direction in which business is moving can be decided and the probability of its continuance or change can be weighed; but the unexpected will continue to happen. If we understand the barometer, and hence the best weather forecast, we may nevertheless get wet if we leave our umbrella at home.

A. L. BOWLEY

The Inter-Ally Debts. By HARVEY E. FISK. (New York: Bankers' Trust Company. 1924. Pp. 367.)

THIS is a useful contribution to a debate of high importance. It has the additional merit that an intriguing problem apt to fan friction between interested parties suspicious of the equity of motive and fairness of conduct of each other is approached from the standpoint of fact rather than controversy. The treatment aspires to be judicial or impartial, and, so far as we can judge, it is "authoritative." "Unusual care has been taken to make it so," and it has earned the compliment of reference, for a special purpose, by Mr. Lloyd George in the House of Commons. For the testimony borne by external critics to the belligerent achievement and post-war financial effort and behaviour of Great Britain is as flattering as it is unimpeachable.

Those responsible for the book have "analysed the accounts of some twenty nations," using, wherever possible, "official statistical publications." But, "in some cases," "official statements were especially prepared." Nor has the help and information given ended at this stage. "Most of the statements were in national currencies," and, "to make the figures comparable," it was also necessary that they should be "expressed in one currency." To elucidate the true position, the double process has been followed, first, of conversion "at the rate of exchange current before the war," and, secondly, of adjustment

to the "price-level of 1913." Thus the figures are all put in "1913 or gold dollars" as well as in "dollars at par of exchange." In this connection a nicety in the handling of debt, turning on the inclusion in, or exclusion from, the reckoning of pre-war as contrasted with post-war purchasing power, and relevant, not merely to internal but also to external loans, is not overlooked in the account, although the compilers, admitting that dubiety affects the figures of wealth and income with which the expenditure on war, and the burden of principal or interest of debts, are fittingly contrasted, refrain from computation of more than the "direct tangible cost of the war to the national treasury of each belligerent," and do not attempt the ambiguous valuation, for example, of the economic equivalent of the loss of life, or injury to health, or dislocation of business or neglected upkeep.

Among points to which attention is here drawn we would refer briefly to a few. The debacle of the mark was postponed of purpose or in fact until the sequel of the war; and the bulk of the inflation of other currencies dated after, not before, the Armistice. The comment is prompted that it was not so inevitable as has been sometimes represented. At earlier stages too a course of action was taken by most belligerents of which the general resemblance was more marked than were the differences of detail. The dictating motive was the quick mobilisation of financial resources, and the mode of reaching this desired end was substantially identical. Borrowing was imperative, and Treasury bills, or the like acknowledgments of debt by the State, were the favoured instrument for securing without dangerous delay the large sums required at once. Inflation ultimately ensued, and, while with some countries it was conscious and direct, with others this indirect, if unintended, consequence of credit-mongering followed with no less stern logic. With regard to our own country reference is made to the loan to the Treasury by the Bank of England of the balances of Government Departments as among the more concealed ways and means of financing; and, while even now it may not be apparent whether Treasury bills furnish the bulk of the "Government securities" in the Currency Notes account, they seem to have been chiefly the form in which advances were made to the Allies by the British Ministry.

The dominant concern at the present time remains for notice. It is the subject of the inter-ally debts. The pertinent figures are supplied and, as we judge, two important positions are established. One is the absolute largeness, and relative preponderance, of the contribution of Great Britain to the burden

of the war. No doubt the loss of life and the destruction—often wilful and unnecessary—of property have pressed with crippling, if not crushing, weight on France, but the data in this volume show that, by comparison with wealth and income, the financial onus resting upon England has been greater, while that shouldered by the United States has by the like contrast been much less heavy.

The other question raised, and, in some degree at any rate, answered here, affects the claim, especially of America, for repayment of the loans to Europe. As we understand, except in some relatively small, definitely specified, instances, Great Britain did not give a guarantee to the United States for any of the debts contracted there by her Allies. Nor did the Americans ask, as they might have done, that all the borrowers should collectively guarantee the repayment of the advances made to each. After the entry of the United States the arrangement was that each ally should stand alone in its financial dealings with America. Nor again, this book contends, were the goods which Great Britain obtained by borrowing from the United States after that country had become belligerent identical with those that she supplied then to her Allies upon credit. Furthermore, it was declared officially that the loans were to be repaid, and officially stipulated that the funds or credits secured were to be expended in the United States. That is one side of the case which should be, as it is, stated with frank straightforwardness.

But, it may none the less be added, a candid full account does not finish here or with the facts, to be placed to her credit or otherwise, that before the United States came into the conflict, she took no risks or chances, and that after her entry, and the close of the fighting, the payment of interest by her acknowledged debtors was deferred at first, not from consideration of their embarrassed state, but to avoid disadvantage or difficulty for their creditor, owing to the utter disorganisation of the exchanges, and that the subsequent supplies of food to Europe were designed to avoid the inconvenient or disastrous consequences of a glut to American producers. Such contentions, in these pages, may be appraised, or discounted, for what they may properly be worth.

The truth remains, and so far Lord Balfour's argument holds good, that after the coming into the combat of the Americans Great Britain practically lent to her Allies as much as she borrowed from the United States; and it seems to follow, as surely as conclusion issues out of premisses, that she would not have had to ask for the American help she thus obtained had she not continued to assist *pro tanto* France and others. Nor, equitably,

is it negligible that she had borne before the brunt of the financial burden, acting as banker for her friends, as well as raising an army and maintaining a blockading fleet, that the Americans, while neutral previously, had profited greatly by the British expenditure on munitions and other supplies, and by the similar smaller outlay of the Allies, kept in funds by England, and that producers in the United States were in the like manner advantaged by the subsequent purchases. Equally significant is it that the most considerable contribution, the event proved, which the Americans were able to render, was their financial aid. It came no doubt in the nick of time, and, but for that, and also if there had not been a near prospect of limitless reinforcement both of ships and men, the war might have ended differently. Yet the peril then menacing the States was real, and in effect Great Britain and her Allies had been before defending Americans as well as themselves.

We would close this summary of the case, based on the statements of this book, by referring, with it, to the opinion expressed in 1917 by that warm friend in need of America and ourselves, Mr. Page. In the biography, which is the best account of England and the English during the war, we are told that in March that year he wrote that a "gift of a billion dollars" should be offered to France, and that England, if she was to be treated worse, should nevertheless only be charged a low rate of interest on the "big loan" which should be made to her. It may, alas, be too late now to recall the "*beau geste*" of such an earlier, more generous impulse; but we are unfeignedly glad that distinguished American economists, like our correspondent, Professor Seligman, should have subsequently urged, with all the strength of cogent informed reasoning at their command, that morally it was not just, and economically it was not expedient, that the United States should press the letter of their bond in the matter of this dispiriting international incubus. We approve, however, of Mr. Baldwin's action, which has already brought commensurate reward to our finance and to British negotiators.

L. L. PRICE

Taxation: the People's Business. By ANDREW W. MELLON. (London: Macmillan. 1924.)

THIS small book by the Secretary to the Treasury in the United States is avowedly propagandist in purpose, but its propaganda is of the best kind. The theme is based on Adam

Smith's maxims, especially the first and fourth. There is thus little of the theory that is new, but the interesting part is Mr. Mellon's application of these maxims as criteria of the soundness and fairness of the present fiscal practice in the United States. Their policy is very similar to our own, namely, to include in expenditure a moderate sum for the reduction of their debt ($22 milliards), especially the short-term debt ($5 milliards), and to estimate for a revenue very little in excess of expenditure. In one respect we are ahead of our cousins across the way. Mr. Mellon complains of the possibility of funds being diverted before they reach the Treasury, and of the consequent party strategy in Congress directed towards framing appropriations in such vague terms that this mis-spending of the grants becomes easy, a procedure scarcely possible now in this country.

Like us, the United States have found themselves in recent years in possession of substantial surpluses (about $300 millions in 1922 and 1923). Taxation was onerous and bore heavily on initiative and enterprise. Reduction of taxes became, therefore, a matter of practical (and of party) politics. Mr. Mellon proposed a general reduction of income-tax rates by 25 per cent.; a rebate of 25 per cent. on earned income contrasted with income from investments; a rise of the lower limit of super-tax from $6,000 to $10,000; and a sweeping reduction in the rate of super-tax on the highest incomes. The proposed changes in the general rate aroused little difference of opinion; but the proposed revision of the super-taxes, particularly the cut from a rate of 50 to one of 25 per cent. on incomes over $100,000, was violently attacked by the Democrats on the ground that it favoured the very rich. The data on which Mr. Mellon founds his case are, therefore, of some interest.

In 1917 nearly three and a half million returns were made, of which 1,015 were of incomes exceeding $300,000. By 1920 the number of returns had risen to a peak at 7·3 millions, but those over $300,000 fell to 395, and in 1921 the highest class numbered only 246. The corresponding total incomes were—in 1917, $13·7 milliards, of which $731 millions from incomes above the dividing line selected; in 1920, $23·7 milliards and $246 millions; and in 1921, $19·6 milliards and $154 millions. In view of the increase in net income between 1917 and 1921 it could not be maintained that there were fewer very rich men in 1921 than in 1917, and it became a pertinent question where the wealth went. The Democrats invoked illicit tax-dodging

and alleged culpable supineness on the part of the department concerned, as the explanation of the drop in the returns; but Mr. Mellon has a much simpler and, it would appear, a correct explanation. The very rich were taxed 58 per cent. of their income. Unless, then, a man was earning over 9 per cent., he was allowed to enjoy less than 4 per cent. on his investments, and had all the risks inseparable from a high rate of interest. But there were available $12 milliards of securities paying 4 per cent. and over, the dividends on which were not only wholly free from taxation, but also were not liable to declaration as income at all. Moreover, this flood of tax-exempt securities was being added to almost daily, for, strange as it may appear to us, every State and even every municipality enjoys the right to issue similar bonds, over which the Federal Government has no power of taxation, and this right cannot be annulled without an amendment to the Constitution. Small wonder, then, that the very rich were transferring their investments into these tax-exempt bonds, even if they got only 4 per cent. In support of his contention he was able to instance the case of Mr. William Rockefeller, who left $7 millions in Standard Oil stocks against $44 millions in tax-exempt bonds.

Mr. Mellon's proposed remedy for this state of affairs was to make legal tax-dodging not worth while by reducing the heavy super-taxation, and he hoped to secure at the same time an increase of revenue and a flow of capital from the very wealthy into industry. In the former hope he was justified, since a more level distribution of the tax-exempt income would be followed by an increase in the amount collected. A further reduction of taxation might thus be expected, with the result that much of the saving so effected would be thrown into industry. Moreover, the fictitious value acquired by the tax-exempt securities would fall, a less amount of the investable capital available would be employed in buying those that came on the market, and on this account also there would be a further amount set free for investment in industry. Other than these two indirect results of the change in fiscal policy, however, the mere change of ownership of the tax-exempt securities would not release capital for investment in industry. His second hope thus appears to be justified only in a secondary manner.

The Treasury, however, put forward also a proposal to amend the Constitution so that the issue of the tax-exempt securities would be made impossible for the future without the consent of the Federal Government. Such a proposal, if carried out,

would have the effect of diverting capital towards industry, since it would discourage the too ready manufacture of loans for unproductive State or municipal enterprises.

The taxation portion of the proposals was passed, with, however, drastic reduction of the cuts in the super-taxes, and in this success the book must have played its part. It probably contributed also to the overwhelming victory of the Republicans in the recent Presidential election. To the American citizen its interest may have faded by now, but to the foreigner it is still useful as a concise and clearly written account of a page in American fiscal policy. And scattered throughout the book there is to be found much information on incomes and income-tax in the United States, which will be of use to the economic student.

J. I. CRAIG

The System of National Finance. By E. HILTON YOUNG. Second Edition. (London: John Murray. 1924.)

THE first edition of Commander Hilton Young's book on our national finance was reviewed in the ECONOMIC JOURNAL in March, 1917. Since then it has become a standard work, and only an indication of the changes in the present edition need be given now. The author has been helped by Mr. N. E. Young of the Treasury, whose name also appears on the title-page, in revising the book, shortening it and bringing it up to date.

The war found our financial system flexible and adaptable enough to cope with the enormous expansion in the figures of our budgets. Consequently the part of the system that relates to the budget, its preparation, execution and audit, remains substantially unaltered. Instead, however, of the original three chapters on Floating Debt, Consols and Funded Debt, and Sinking Funds, there are now five—two on the National Debt, one on Floating Debt, including savings certificates and currency notes, one on the multiplicity of contingent liabilities arising from our guarantees on Egyptian, Turkish, Greek, Austrian, Sudan, Transvaal and other stocks, and, still more important, on the Local Loans and Irish Land Stock, and from the advances under the Trade Facilities and Export Credit Acts, and the fifth on Sinking Funds. This part of the book is new, with the exception of the chapter on Sinking Funds, which is only partially rewritten. The final chapter on the relations between the

Government, the Bank and the City remains unchanged. The Appendices have been suitably modified to exhibit the latest model of the Appropriation Accounts.

The book, though now a war-tried veteran, remains what it was in its youth, a facile, clear and comprehensive account of our national financial system, which may be recommended to anyone—that is, to everyone—who is interested in knowing how the system works.

J. I. CRAIG

An Analysis of the Finances of the Union of South Africa. By M. H. DE KOCK. (Cape Town: Juta. 1922. Pp. vi + 238. 24 × 14 cm.)

THIS book, which is based on a doctoral dissertation at Harvard, contains a summary of the facts as to revenue, expenditure, debt and financial administration of the Union, down to the financial year 1919–20 inclusive. It is well-arranged, trustworthy and fully provided with references: it does not profess to offer criticism or personal opinion, so that there is little to say about the book itself other than that the author has accomplished his task satisfactorily. The subject-matter of the book—the financial policy itself—opens out extensive possibilities of discussion, from which we may choose one or two salient points. Thus, the author says: "The establishment of the Union was prompted, in no slight degree, by the realisation of the substantial economies likely to be effected by the unification of the railways, Government departments and Civil Service of the four colonies—the substitution of one for four administrative systems. Various other factors have been enumerated, such as the consolidation of the public debts with the consequent improvement in South African credit, the increased power of self-defence and self-government, the gain of that stability which attracts capital and promotes enterprise, the strength to deal with native problems, and the uniformity of trade regulations."

It is now very generally felt that these expectations have not been realised. Unification of the four colonies, instead of effecting economy, has led to the most extravagant phase of government the country has known. This is not due to the direct effect of the war, in which South Africa engaged in a half-hearted way; war expenditure amounted to £39,000,000, of which £31,000,000 was borrowed, and that mostly in the country. Although this burden is moderate, the total expenditure on

government absorbs an excessive fraction of the national income, and taxation has become more burdensome than formerly; the country, in fact, has not recovered from the outburst of false prosperity in 1919. The public debt is mainly represented by productive assets, it is true, but it has been increasing too rapidly; since the date of the statistics given by de Kock the increase in gross debt has been about eight or nine millions a year. The new Government that came into power this year finds itself compelled to borrow an equal amount, and will evidently meet great difficulties in attempting a policy of economy. But South Africa is not progressing as fast as the other dominions; it is receiving no immigrants—on the contrary, there is a net efflux of white people—so that it cannot continue indefinitely to increase its public liabilities to such an extent.

R. A. LEHFELDT

A History of Currency in the United States. By A. BARTON HEPBURN. (Third and Revised Edition.)

AMONG those who heard with regret of the death of Mr. Hepburn two years ago, there will be many who will be interested to learn that he left behind him the materials for a new edition of his well-known *History of Currency in the United States.* The new matter comprises half-a-dozen chapters, and occupies nearly a hundred pages. The previous edition, which appeared in 1915, included the crisis at the outbreak of war in 1914, and the initiation of the Federal Reserve System. The new edition includes the entry of the United States into the war, and the measures of war finance which followed, but its main interest is in the period from the Armistice to the end of 1921.

As to the war period, Mr. Hepburn's principal criticisms upon the financial policy adopted were two. The first was "that the Federal Reserve authorities surrendered their discount policy . . . to the fiscal policy of the Treasury, and made rediscount rates much lower than they should have been," in order to facilitate cheap borrowing. The second was that exports of gold were prohibited. The United States "abandoned the gold standard at a time when the gold reserves in the hands of the redeeming agencies exceeded $2,000,000,000." Many people have forgotten that at one time dollars fell to a heavy discount in comparison with some neutral European currencies. Mr. Hepburn adds the interesting fact that there was a premium on gold for industrial use in the United States.

His criticism leads up to the comment that " Our American financial authorities were in part imbued with the unsound Continental doctrine regarding gold reserves." The Continental is contrasted with the British doctrine, which " has always been that gold reserves are accumulated in quiet times in order that they may be *used* in emergencies." Mr. Hepburn did not spoil the lesson he was reading to his countrymen by recalling the British prohibition on the export of gold.

One of the new chapters is devoted to the post-war boom and the crisis of 1920. In it we have the shrewd judgment of an experienced man of affairs, familiar with all branches of practical banking. It is no cause for surprise if some of his explanations are arrived at with little regard to theoretical principles. " In the relation between prices and bank credits and between prices and the value of money, prices are much more apt to be causes than effect, and the volume of bank credit is much more apt to be a resultant of price changes than it is to be an active cause of price changes." This is a half-truth, which by itself serves no useful purpose. Prof. Irving Fisher's version of the quantity theory, which Mr. Hepburn believed to have been " very badly discredited," does not, as a matter of fact, say which is cause and which is effect; it merely asserts a certain mathematical relation between the price level, the quantity of money and credit, the volume of transactions, and the rapidity of circulation.

And while Mr. Hepburn repudiated any monetary explanation of the rise of prices in the United States in 1919–20, he yet claimed that experience since 1914 had been " on the whole a vindication of the established principles of money and credit." That one of the best established principles is that over-issue causes depreciation and a rise of prices, might be illustrated from several passages in the earlier chapters of this very book.

No doubt the relation between over-issue and depreciation is far less simple than used to be supposed. But that does not mean that a *general* rise of prices is to be attributed to non-monetary causes.

The last and longest of the new chapters is devoted to the gold and rediscount policy of the Federal Reserve Banks. Here we find an interesting discussion of the relation between the rediscount rate and the market rates, a subject to which Mr. Hepburn was qualified to contribute practical knowledge of the American credit market.

He held that the rediscount rate ought to be above the market

rate for the kind of paper which is usually rediscounted. This view was really based on nothing more than a comparison with the London money market. And though he argued ingeniously that the conditions in the English and American markets were comparable, he left out of account one vital difference, that in London rediscounts are only an occasional phenomenon, small in amount and short in period, whereas in the Federal Reserve System there is a considerable amount of rediscounts always outstanding.

If in London the discount houses were always indebted to the Bank to the amount of scores of millions, every additional bill offered to them would mean an increase in their demands upon the Bank, and they would refuse to discount except at a rate high enough to leave a margin of profit after rediscounting. This is the normal condition of things in New York (except that the member banks rediscount direct with the Federal Reserve Bank, and that they usually rediscount "commercial paper" instead of bills). Occasionally, as in the summer of 1922, and still more at the present time, rediscounts with the Federal Reserve Banks fall to an exceptionally low figure. The market rate is then little above the rediscount rate (as at present) and may even be fractionally below it (as in 1922). The market, as Mr. Hepburn pointed out, deals in paper of four to six months, which is too long to be eligible for rediscount. The comparison, he maintained, should more properly be with a kind of paper which does not ordinarily come into the market, "loans made by banks in the great cities to those of their customers who have deposit accounts and lines of credit with several banks." These loans are made at "truly competitive rates" because the same business has the choice of borrowing from several banks and in several cities. But as apparently these rates approximate to the quoted rates for commercial paper, though they fluctuate less widely, the quoted rates may be relied upon as an indication of the market.

Mr. Hepburn's dogma that the rediscount rate should exceed the market rate has not in reality any general validity at all. *It applies only in the case where a Central Bank makes a practice* of keeping up its open market assets to such a level that the market has sufficient cash without rediscounting (except occasionally).

By the end of 1921 the accumulation of gold in America had already made great progress. The cash reserves of the Federal Reserve Banks were near $3000 millions.

Mr. Hepburn took the view that the Americans were holding this gold as trustees. " We cannot treat it as a permanent possession, and we must hold it ready to give back to Europe when Europe is prepared to take it." What he particularly feared was that, if it were regarded as a permanent possession and made the basis for credits, " it would tend to depreciate upon our hands."

He was not alone among his countrymen in failing to see, first, that the reason why America received the gold at all was that the commodity value of the dollar was raised by a violent contraction of credit, and secondly, that by keeping up the commodity value of the dollar (and therefore of gold) the time when Europe would be prepared to take it was indefinitely postponed.

R. G. HAWTREY

The Austrian Crown. By J. VAN WALRE DE BORDES.
La reconstitution financière de l'Autriche. By P. FRANCK.

ONE of the difficulties which hampers the economist, as compared with the scientific worker in other fields, is the practical impossibility of making experiments. History provides him, at best, with imperfectly reported analogies to the conditions into which he wishes to inquire. During the last ten years, however, Europe has provided the contemporary observer with something like a series of laboratory experiments on a gigantic scale, especially in the field of currency and finance. Of the data thus presented, only a small part has yet been carefully dealt with. M. de Bordes here examines a particular case of monetary phenomena, the case of acute monetary depreciation, as shown by the experiences of the Austrian crown during the years 1914–23. The book is a very able attempt to test and restate current theories in the light of actual facts, carefully observed. It is neither a mere catalogue of events nor a series of deductive generalisations based on general tendencies, but a close inquiry into the phenomena accompanying the depreciation and stabilisation of the Austrian crown, with an application of the results to general theories about the value of money. M. de Bordes proceeds from a basis of carefully analysed statistical data to theoretical conclusions, more solidly based on facts, and therefore more satisfactory, than economic generalisations are apt to be.

The book falls into three parts. The historical side of the subject is treated in one chapter. M. de Bordes summarises

almost too briefly the depreciation of the crown and the steps taken under the auspices of the League of Nations to stabilise it, from the deliberate stabilisation of the exchange rates by the Devisenzentrale in August 1922, through the stopping of further fiduciary issues, and the setting up of the new Austrian National Bank, with sole right of note issue, to the ratification of the political and economic guarantees made to Austria by the Great Powers, and finally to the successful floating of a foreign loan and the slow working out, under the supervision of the Commissioner-General, of the League's programme for abolishing the Budget deficit by economies in administration on the one hand and increased taxation on the other. The section in the last chapter dealing with the method by which the National Bank controls the foreign exchange market, on the principles of the gold exchange standard system, by means of its reserves of foreign bills, might, with advantage, have been included here. M. de Bordes proceeds to deal with the statistical data which the periods of depreciation and stabilisation afford him. He examines in turn the available figures relating to the quantity of money, the level of prices and the foreign exchange rates, and draws up, in Chapter VI., six tables comparing the movement of the three series in the years 1914–18 and in each of the five following years. The figures, except in the case of the foreign exchange rates, are not complete. No regular publication of index-numbers was made in Austria until 1921, and it has not been possible to get conclusive figures of any means of payment other than the note circulation, on which he is consequently obliged to rely for his estimates of the quantity of money. This section contains an interesting analysis of the various official index-numbers now published in Austria.

The last two chapters of the book contain his theoretical deductions. He finds, as might have been expected, that his charts show considerable divergence from the strict letter of the quantity theory and of the theory of purchasing power parities, nor is he led to accept without comment the usual account of the working of factors affecting the rates of exchange. Readers must go to the book for a full analysis of the causes of these divergencies. One or two points may be selected here.

He shows that a change in the rates of foreign exchange due to some other cause than a change in foreign price levels—causes such as he details on pp. 178–97—may of themselves produce a change in the *general* price level at home, a sequence of events which is formally denied by some writers on purchasing

power parities, as, for instance, Prof. Cassel (*Money and Foreign Exchange after 1914*, p. 167). This is obviously an important modification of the theory. But his causal explanation of these events is not in all respects satisfactory. It is easy to see that a process of inflation will lead to a rise in all prices and to a fall in foreign exchange rates; but it is not so clear how an initial fall in the rate of exchange can lead to a rise in the general price level. M. de Bordes shows how, when a fall in exchange rates has gone on for some time, sellers raise their prices in accordance with the depreciation in foreign exchange, a process known as valorisation. But higher prices all round cannot be maintained merely by this nominal adjustment; there must be some increase in the quantity of money or some equivalent change in one of the other factors of the equation. What does, in fact, take place is still obscure. A suggestion as to the kind of thing which happens, besides the increase in velocity of circulation and the use of foreign currencies for internal transactions to which he refers, may perhaps be hazarded. When the rate of exchange falls, the price of imported goods rises. Importers find that they are better off so far as their expenditure on non-imported goods goes, manufacturers find their costs of production increased so far as they use imported materials. There will be a tendency for both these classes of people to increase their borrowing from the banks or to diminish the amount of their balances, in the one case from undue optimism engendered by temporary extra profits, in the other to meet increased costs which it is hoped to cover later by higher prices. Exporters will also be encouraged to expand their businesses The extra purchasing power thus created will gradually spread through the price system by the familiar process and raise prices all round. In the case of Austria, the necessary increase in purchasing power probably came about also in another way, viz. by the issue of notes to pay increased salaries to State officials whose pay was, by 1922, regulated by a cost of living index-number. M. de Bordes makes some reference on p. 198 to the increase in the circulation "caused by the rise in prices," but does not give a description of the process by which this increase came about. The reaction of the rate of exchange on the price level seems to take place through a larger number of more uncertain factors than the reaction of the price level on the rate of exchange. More detailed study of the first of these processes would be a useful piece of work.

M. de Bordes comes to the interesting conclusion that

depreciation in Austria was stopped by the artificial stabilisation of the rates of exchange. Prices which had been "simply following these rates" were then stabilised too, and the continued increase in the circulation "was a matter of indifference for the time being." Here again the analysis does not appear to be complete. The increased issues of notes did not upset the balance because they were counteracted by a decrease in the velocities of circulation and by the disuse of foreign currencies for internal transactions. This was due to a sudden revival of confidence in the future of the crown, a revival owing partly to the apparent stability of the rates of exchange, but in part also to other causes, such as the intervention of the League and the prospect of a foreign loan. It was this sudden increase in confidence which checked the rush to get rid of crowns and made it possible to issue further notes while the price level actually fell.

Another interesting point which emerges from M. de Bordes' analysis of the effects of a change in exchange rates originating in some cause independent of home or foreign price levels is the working of the gold exchange standard under these conditions. This system maintains a stable rate of exchange at the expense of a stable price level. But if the occasion for readjustment arises from a change in exchange rates not due to a change in price levels, then the working of the system will involve a *double* fluctuation in the home price level. Thus, suppose an increased demand for foreign currencies due to speculation, the regulating authority will sell exchange in return for home currency, thus producing a fall in the home price level. Since this will not correspond to a fall in prices abroad, it will lead to a premium on exports, which will again react on the exchange market and pull prices up owing to the increased purchases of foreign exchange in return for home currency by the regulating authority. Under these circumstances it is important to devise methods of keeping the exchange rates stable without affecting the circulation. M. de Bordes suggests various ways of dealing with a surplus supply of foreign exchange. The recent policy of the Austrian National Bank of making loans to its customers for the purpose of buying foreign exchange from it has met with severe criticism, but it seems to be making an effort, if a mistaken one, to meet a demand due to temporary speculative influences without causing deflation.

Many other points might be noticed if space allowed. If this review has enlarged but little on the excellence of the book,

it is because the stimulating quality of the contents draws irresistibly to comment and criticism; but it is indeed one of the best books on currency questions which has appeared for some time.

M. Franck's book is a doctor's thesis presented to the University of Paris. It is a straightforward account, drawn mainly from documents published by the League of Nations, of the depreciation of the Austrian crown and of the steps taken to stabilise it. The choice of matter does not always seem well proportioned. It might be desirable, for instance, to have rather less about the abortive schemes of 1921, and rather more detail about the measures actually taken; the regulations governing the Austrian National Bank are not given nearly fully enough to enable the reader to grasp the conditions under which it works. The writer shows himself less critical than some people of the method by which a balanced Budget has been attained. The book would be the better for an index, but it provides a useful summary of events for those who have not time to go to the original documents.

J. E. NORTON

Die Devalvierung des österreichischen Papiergeld im Jahre 1811: *Eine finanzgeschichtliche Darstellung nach archivalischen Quellen.* By VICTOR HOFMANN. (Munich and Leipzig: Duncker and Humblot. Pp. 231.)

THE past history of Austria presents many examples of striking experiments in currency matters. One of these experiments, carried out in 1811, is described by Doctor Victor Hofmann in this book. The author is in charge of the archives in the Federal Ministry of Finance in Vienna and, having access to all the records, is eminently qualified by his position to undertake the task. Considering the present plight of Austria, the desire to interrogate the past so as to elicit a lesson for the present is only natural. The long-drawn-out struggle, first with revolutionary France and then with Napoleon, which began in 1792 and lasted up to 1815, with only brief intervals of cessation of hostilities, was financed by the printing of paper money, and in a very few years the inevitable consequences of such a method of financing the war made their appearance. The metallic portion of the currency disappeared from circulation; the paper money which took its place retained only a negligible fraction of its nominal value; the Budget showed enormous and recurring deficits; the prices of things soared up to

fantastic heights, and then, as now, people found it difficult to live on their incomes. The Archduke John, the youngest brother of the Emperor and the leader in the disastrous campaign of 1809, thus describes the condition of Austria: "The monarchy stands on the brink of ruin and dissolution, the army is annihilated, the spirit is crushed and the finances are in the greatest disorder. The internal administration is deplorable. Distress, discontent and despair prevail everywhere." On the death of O'Donnell, who was then the Minister of Finance and had striven bravely against great odds, in evolving order out of chaos, the Emperor entrusted the direction of financial affairs to Count Joseph Wallis, a nobleman of Bohemia, who was Irish by descent. He is described by his secretary, who later succeeded him in the office, as "resembling a powdered lion, rich and vain, who, while not possessing any expert knowledge of financial affairs, possessed the qualities of firmness and courage in the execution of decisions once made, unlike his predecessor, who broke down under the weight of his heavy responsibility. He went to bed with a dozen or so of books, read the title-page and a few sentences, then took up another, without ever finishing a page." The Count acquired his knowledge of financial subjects from two treatises, namely, from (1) *An Inquiry into the Consequences to a State of an Excessive Issue of Paper Money*, by Anton Van Coeverden, published at Göttingen in 1805, and (2) *National Economy*, by Count Julius Von Soden, a work consisting of eight volumes. Specially useful to Count Joseph Wallis was the work of Coeverden, who wrote under the direct impression of the financial chaos prevailing at the time in France. Coeverden rejected such measures as reduction of the weight of coins, passing of laws against the premium on coins, fixing of prices and issuing of restricted quantities of paper as utterly ineffective, and pointed to the necessity of preventing deficits and creating surpluses in the Budget, which could only be achieved by the exercise of the strictest economy in expenditure, by raising the rates of taxes and by increasing the income from State lands and property. Count Wallis took some time in preparing his scheme for the reorganisation of the finances and had to overcome the opposition of the other members of the Austrian Cabinet, many of whom proposed solutions of their own. Towards the end of December 1810 the Minister placed before the Emperor a draft of his proposals, which was finally passed and signed by the Emperor after a good deal of discussion. The Imperial Decree embodying these proposals was to be promulgated on

March 15, 1811, and its principal points may be summarised as follows:

(1) The face value of all the notes was reduced to one-fifth. They were to be recalled from circulation and exchanged at par for another species of notes called Redemption notes. These Redemption notes were to be secured on the credit of the different States of the monarchy, and a fund was to be created by the sale of Church lands and by enhancing the contribution of the States, to act as a reserve for their Redemption.

(2) These Redemption notes were to be declared from the 1st of February 1812 as the sole legal tender, and to be known as the Viennese currency.

(3) Old debts were to be discharged in these Redemption notes according to a scale appended to the Decree.

(4) Interest on the Public Debt was reduced to one-half.

(5) All taxes were to be paid either in Redemption notes or in the old paper money reckoned at one-fifth of the value of the former. Payment of salaries, pensions and other obligations of the State was to be effected in the same manner.

In the introductory portion of the Imperial Decree the end aimed at was declared to be the reduction of notes to such an amount as would establish a proper relation between the quantity of such notes and the legitimate needs of commerce on the one hand, and, on the other, to secure and to maintain for the subjects of His Imperial Majesty the advantages of paper money, which produced harm only when issued in excessive quantities.

The strictest secrecy was maintained as regards the contents of the Imperial Decree, which was to be issued on the same date in all States of the Monarchy. In the copy sent to the Archduke Charles, Palatine of Hungary, many of the provisions were left out and others were modified, for fear of Hungarian opposition. The police showed a marvellous vigilance and activity in acquainting the central authorities with the reception accorded to the Decree and the impression it created. It appears to have been the department of the monarchy which was most efficiently organised. It is interesting to note that some of the Imperial ladies, receiving a hint of what was coming, had made large purchases before the promulgation of the Decree. The system of Count Wallis broke down, as war clouds appeared again on the horizon in 1812 and necessitated a return to the printing of notes. The verdict of Prince Metternich was that the Emperor, as well as he himself, attached only a limited importance to the plans of Count Wallis, and regarded his system

as a temporary makeshift for reaching a position of some stability, from which they could view the future course of the war and its fortunes.

L. K. HYDER

Die geldtheoretische und geldrechtliche Seite des Stabilisierungsproblem. By LUDWIG MISES and FRANZ KLEIN. (Munich and Leipzig: Duncker and Humblot. Pp. 75.)

IN this monograph, written at the invitation of the Verein für Sozialpolitik, the problem of Stabilisation is discussed, in its twofold aspects of monetary theory and of law, by Mises and Dr. Franz Klein respectively. Mises' contribution is much the more important. According to him, the problem of stabilisation as it presents itself to-day is not the same as the pre-war problem. Then it meant stabilising the purchasing power of gold, and the problem that now confronts different countries relates to stabilising the value of paper in relation to gold. The evils of an unstable gold standard of pre-war days are insignificant compared with the evils of paper currencies of to-day.

Mises describes how the currencies of Central European countries have come to rest on paper by a constant resort to the device of covering deficits between income and expenditure by the creation of paper money, both during and after the last war, and how the evils and sufferings of the last ten years have gradually compelled people to a vivid realisation of the fact that, without a reform of the monetary systems, neither an orderly development at home nor the establishment of economic relations abroad is possible.

Mises analyses the symptoms and effects of advanced inflation lucidly, and points out that sooner or later the monetary system of countries which indulge in this practice of inflation breaks down. People begin by decreasing their demand for such money and end by discarding it altogether. During the process of depreciation the value of money falls more than in proportion to the quantity of notes forced into circulation, and at the high level of prices people find that they have not enough money for the settlement of their transactions. He disposes of, in a few sentences, the popular notion that the depreciation of the mark is due to speculation on the part of foreigners. But for such speculation the position of the mark would have been worse. The author discusses the remedies which are usually proposed by politicians and writers in newspapers, and is able to establish

his statement that all such remedies, for example, prohibition or centralisation of dealings in foreign exchange, are either ineffective or superfluous, if inflation is the cause of such depreciation. He further refutes the opinion widely held in Germany, that the depreciation of the mark is due to an unfavourable balance of trade or the necessity of having to make reparation payments. Not these but inflation is the cause of such depreciation. Mises advocates a return to the gold standard, but would be content with the gold exchange standard for the present if the ideal of the gold standard is ultimately reached. The immediate steps that should be taken are that the State must absolutely abandon the practice of covering deficits by the printing of notes, the mark should be devalued at its present low level, the existing quantity of notes should be declared to be the statutory maximum permissible, the Reichsbank should be forbidden to increase either its note circulation or its Giro liabilities not covered by the deposit of gold, foreign bills of exchange, or foreign currency, and no arrangement of any kind should be tolerated under which any evasion of the above rules could take place. The Reichsbank must be bound by law to exchange either notes for gold or gold for notes at a fixed rate. To obviate the risk that the bank might be depleted of its gold reserves in the beginning, it should pay out gold either in bars or in coin for large amounts only. Mises is prepared to recommend the introduction of gold coins in internal circulation, in order to break the habit of using notes.

Dr. Klein in his essay discusses, with a jurist's fondness for precise distinctions, the juridical meanings of the word stabilisation, and then examines at length the proposal of another Austrian writer, that in order to check the fluctuations of paper money and thereby to prevent, as far as possible, undeserved gains and losses, all money contracts in future should first be expressed in gold at the rate prevailing on the day the contract is entered into, the borrower should receive payment in paper and the debt should be liquidated by re-converting the fixed gold value of the debt in paper at the rate prevailing on the day of liquidation. Since the proposal applies to long-term contracts, it would not remove the uncertainty surrounding transactions of daily life, and it is by no means certain that further depreciation would even be moderated. In all forms of stabilisation the ideal of social justice between the different classes must be constantly kept in view and the question of old debts must be satisfactorily settled. The author rejects the proposal as defective

on the grounds given above. Devaluation, in his opinion, would violate the rights of property guaranteed by the German and Austrian constitutions. The author concludes on a note of caution and inclines to the view that, considering the difficulties, the best course for the State might be after all to begin afresh and introduce a new currency.

L. K. HYDER

Grundriss der Sozialökonomik: Zweite Abteilung: Erster Teil. Second Edition. (Tübingen: Mohr. 1923. Pp. viii + 309.)

ONE approaches these volumes with feelings of respect, for the names of the most illustrious economists of Central Europe adorn the title-page, as contributors to the series. No new theories of a writer anxious to hit off are propounded in the present volume. It deals with some of the subjects which form the groundwork of economics and the contributions are from writers who occupy a high place as economists. The geographical foundations of economic activity are laid bare by Hettner; the population question is discussed in a masterly manner by Mombert; the interesting and very often neglected problems of race in their bearing on economic activity are surveyed by Michels; the theory of consumption receives at the hands of Oldenberg an able and exhaustive treatment, and in the concluding memorandum the problems of division of labour and fatigue in relation to the efficiency and well-being of workers and their joy of work are treated by Herkner. Before an attempt is made to give a summary of the views of the different writers, two remarks must be made. In the first place, the statement of theory does not diverge, in essentials, from lines accepted as sound among English economists. In the second place, since the divisions of economic science are closely interrelated, divergent views on minor points of detail are bound to arise in a work of this kind, in which different writers collaborate.

In introducing us to his subject, Hettner points out that writers of antiquity, *e.g.* Hippocrates and Strabo, were well aware of the dependence of man on the nature of the earth's surface. Montesquieu and Herder took up the threads of the classical authors and gave a rather exaggerated expression to this relation of dependence. It was left to Alexander von Humboldt to establish the close connection between the political and economic life of the countries which he visited during his travels and the peculiarities of their geographical conditions.

Other writers, notably Peschel, Reclus and Richthofen, continued their studies along lines indicated by Humboldt, and Ratzel was able to furnish a comprehensive account of this dependence of man on the facts of his physical surroundings. The task which geography should set before itself now is not merely to discuss the influence of nature on man, but to deal in a systematic manner with man's economic work and its geographical distribution over the entire surface of the earth, which is not smooth like a billiard-table, but presents an unending variety of conditions to man for his economic activity.

In tracing the first steps of man's advance, Hettner is of opinion that the older view, based on the Bible, and held largely even now, that the domestication of animals and the emergence of nomadic life preceded the cultivation of plants, is erroneous. The cultivation of plants came first and the domestication of animals afterwards. It is highly improbable that the hunter suddenly developed into a trainer of animals and then passed over to agriculture. The course of actual development seems to have been just the reverse of this. In speaking of the ancient culture of India, which developed in the country after the entry of the Aryans and extended its influence far beyond the frontiers of India, Hettner seems to forget that the original inhabitants, the Dravidians, possessed a culture of their own, especially in the south of India, according to some weighty authorities, and gave a tone to some of the important institutions of the invaders. His remarks on the "Europeanising tendencies" of the present-day world are interesting. Some Brahmin, reading the past of his own country, might be tempted to ask: "What became of the Hellenising tendencies of the Greek in India long ago?" The query would not be pertinent, for our present-day "world-economy," being based on the solid and far-reaching foundations of modern means of communication, is assured of a stable existence of increasing usefulness.

Mombert's discussion of the population question is weighty. The reviewer has not come across in any other work such a masterly statement of a question, many intricate sides of which are still wrapped up in obscurity, although the broad outlines are definite and well marked. The causes of the continuous fall in the birth-rate in many countries and among various social groups are traced lucidly to their ultimate psychological origins. The author's opinion is that the fall in the birth-rate is due to the spread of economic rationalism, and whole groups of people, economically strong, have shown a decided tendency to

restrict their numbers, with the object of maintaining their standard of living. Psychological and not functional changes, as was previously supposed, are in progress and serve to explain this downward tendency of the birth-rate. The contrast between town and country in this respect will become less marked in course of time. While giving a well-balanced account of the views of Malthus, Mombert criticises him for his mistaken belief that there would be a diminution of the marriage-rate and a rise in the average age at which people marry. This belief has been rendered false by the trend of events in the last few decades. Malthus could not foresee a development in which the rate of increase of the population would be separated from and thus be made independent of the marriage-rate. Further, the average age of marriage has fallen and not risen. The manner in which his positive checks operate in advanced communities with a higher standard of living is not the same as in primitive communities. Want presses the latter, while the former are oppressed not by scarcity itself, but by the fear of scarcity and their anxiety lest their standard of living might be brought down. Agreeing with the statement of Karl Marx, that "an abstract law of population exists only for animals and plants in so far as man does not interfere and that, as regards man himself, there is for every period of production a law of population applicable to that period only," the author is of opinion that Malthus is not supported by the evidence of history in his formulation of a law of population good for all times and all people. Throughout his discussion of the population problem Mombert marshals his evidence impressively and takes due care in examining all sides of a question before making a general statement.

The interesting relations between races of mankind and their different economic activities are examined by Michels, both in the light of history and the facts of the industrial world as it is to-day. As regards industrially backward races, the author is of opinion that a very large portion of their defective qualities is not inherent or inborn, but is the result of the economic and historical circumstances of their evolution, which are, therefore, from their nature accidental and transitory. When the first railways were built in Germany, foreign observers thought, and the Germans themselves believed, that the railways did not suit the spirit of the German character, as it was tuned more to a *festina lente* way of life. In 1820 Genovesi, an Italian writer, wrote of the Germans that they would not be able to show such

an advance in trade and industry as the English and the French could boast of. Kant reproached the Italians for their keenness for the practical side of life. These statements appear strange in the light of subsequent developments. The author's view is that there is undoubtedly at present a differentiation of races in respect of industrial aptitudes and economic activity, but it cannot be regarded as unalterable and permanent. For the present, however, "world economy" requires the help of all races and no one race can be considered to be superfluous.

Then Oldenberg introduces us to the subject of consumption, accounts for its undeveloped state in the past, and proceeds to describe the results that have been obtained so far by a systematic study of this branch of economics. His treatment of the subject of family budgets is illuminating, and he is able to bring out clearly the instructive uniformities which are revealed by an analysis of the expenditure of classes with small incomes. He devotes a good deal of space to the discussion of diet and the food-values of the various articles. The useful substances which are at present classed under the convenient label of "vitamins," in the present imperfect state of our knowledge concerning their real character, duly find a place in his discussion of this subject. A knowledge of many more subjects must be necessary for students of economics in Germany when boundaries separating the different fields are pulled down in this manner.

In the final chapter, the contents of which must be noticed only very briefly in view of the length of this review, Professor Herkner discusses the question of labour and division of labour from the points of view of the workman, the employer, and society. The central problem is how to reduce to a minimum the direct and indirect discommodities of labour, to create a feeling of delight in work in the mind of the workman, and to increase productive efficiency at the same time. In the Middle Ages, the people whose hands reared the noble piles of Gothic architecture were actuated by the love of God in the execution of the least little task. Ordinary commodities were produced under the vigilant eyes of masters, jealous of the reputation of their craft and glorying in its excellence. In modern industry, apart from the rare occasions on which the millions who toil are deeply stirred by great national events, by a feeling that, however humble their rôle, by doing a task well they will be helping in the realisation of some great dream or ideal, there is nothing so high as can properly take the place of either love of

God or the approbation of their fellow-man. The incentive to work lies in money, which is a poor substitute indeed.

Thus still unsolved is the problem of labour, one side of which—that relating to joy of work—found poetic expression in the following lines by Schiller:

> " dass der Mensch im inneren Herzen spüret
> Was er erschafft mit seiner Hand,"

and the other side—that relating to monotony of life—in Dehmel's poem *Der Arbeitsmann*:

> " Uns fehlt nur eine Kleinigkeit
> Um so frei zu sein wie die Vögel sind:
> Nur Zeit."

L. K. HYDER

Gesammelte Aufsätze zur Social und Wirtschaftsgeschichte. By MAX WEBER. (Tübingen: Verlag von J. C. B. Mohr. 1924. Pp. iv + 556.)

THIS volume consists of six sections, written at different periods and collected and published since Weber's death, so as to form a coherent whole.

The first treatise, which fills more than one half the volume, is a detailed exposition of the social and economic organisation of the ancient world. Mesopotamia, Egypt, Palestine, Greece and Rome are exhaustively described. The second treatise discusses the causes of the ruin of the ancient civilisation. The fall of Rome Weber attributes neither to the strength of her enemies nor to the incapacity of her rulers. Most of the causes assigned are wide of the mark. Despotism is not necessarily fatal to a country—witness the success of Frederick the Great; luxury and immorality are symptoms rather than causes of decline, and the actual effects of the emancipation of women and the loosening of the marriage tie have been exaggerated. Weber's theory, expounded in great detail, is that the ancient civilisation rested uneasily and insecurely on a basis of slavery, and that the failure of the supply of slaves, when there were no worlds left to conquer, necessarily brought with it the dissolution of the existing order.

The third treatise deals with the Trading Companies of the Middle Ages, when civilisation woke like a giant refreshed after her long sleep through the Feudal Ages. An essentially prosaic dissertation is ushered in with unexpected poetic metaphors. Neither the songs of the minstrels, we are told, nor the tourneys of the feudal lords succeeded in waking the slumbering giant.

Civilisation owes her revival to the busy trafficking of the mediæval city. Weber describes first the development of home industry, and then the growth of commerce and international trade, treating the subject almost entirely from the legal point of view. The different forms of Trading Associations of Spain, Southern France, Sicily and Lower Italy, Genoa, Pisa, Venice, Milan, Florence and Verona are described in detail, with copious quotations from the mediæval mercantile codes. The Genoese Statutes of 1588–89 are of particular interest as showing the origin of Joint Stock Limited Liability Companies.

There is here a considerable break in the historical sequence, for the last three treatises deal with modern German agricultural problems. Treatise IV, "*Die ländliche Arbeitsverfassung*," and Treatise V, "*Entwickelungstendenzen in der Lage der ostelbischen Landarbeiter*," cover approximately the same ground, both being chiefly concerned with the catastrophe which had overtaken agriculture east of the Elbe at the time of writing (1893–4). In South and West Germany, small peasant estates were still the rule, and practically no agricultural economic problem existed. In North-West Germany large peasant estates passed from father to son without subdivision, an arrangement which involved the divorce of the other sons from the soil, and their migration into the cities—still no serious problem. But east of the Elbe, large estates cultivated by hired labour were the rule, and here the introduction of the threshing machine and the development of the sugar-beet industry, with its capitalist organisation and its demand for intensive seasonal instead of all-the-year-round labour, had produced a very serious state of affairs. The seasonal demand was met by Russo-Polish immigrants, who poured in their hordes over the frontier, ousting the German labourer from his home and soil, and permanently lowering the local standard of living. The result was not only socially disastrous, it was politically dangerous. But a remedy was not easy to discover. After discussing all the alternatives that had been or could be suggested, Weber proposed the absolute exclusion of Russian workmen, and the reorganisation of the relations between landlords and workers. He disapproved of small peasant holdings which fetter the owner and hand him over, tied hand and foot, to the landlord. On the other hand, he proposed that the worker should rent a holding, and divide his time between the cultivation of his own small farm and the supply of paid services to his landlord.

The above is no more than a brief survey of a really monumental work. It seems a pity that the product of so much

learning, and matters so inherently interesting, should have been presented in a style so arid and involved that it must discourage any but the most persistent German student. Only the chapter on "*Die ländliche Arbeitsverfassung*" (some 25 pages out of a total of 556), which was originally given as a lecture, is plain straightforward reading. Everywhere else it is difficult to disentangle principles from an almost overwhelming mass of detail, and the compilers have not attempted to assist the reader either by an adequate table of contents or by an Index.

H. REYNARD

Gesammelte Schriften von Eugen von Böhm Bawerk. Herausgegeben von FRANK X. WEISS. (Hölder-Pichler-Tempsky, Wien und Leipzig, 1924. Pp. xix + 515.)

THIS collection contains the best part of the Miscellaneous Writings of Böhm Bawerk, beginning with a complete reproduction of his first book, Rights and Relations (*Rechte und Verhältnisse*), 1881, perhaps the most brilliant and unanswerable of his economic contentions, as yet untranslated. It naturally does not include the monumental work on Interest and Theories of Interest. The other (fourteen) articles are some of them old friends; but one or two are new to most readers out of Austria. The last purely economic tract [1] (Force or Economic Law?) is here, and there is a monetary article which appeared in a Vienna newspaper as late as January 1914, the year of his death.[2] The monetary article has a special interest because we had hitherto no taste of his quality as Finance Minister, currency and finance figuring rarely in Böhm's economic writings (*e.g.* p. 129). The Austrian balance of payments, after being "favourable" for thirty years, became "unfavourable" in 1907 and had remained so. Many explained this by the progress of manufacture in Austria and Hungary. Böhm answers that such progress would more naturally have led to the opposite result, furnishing the nation wealth to lend to others rather than obliging it to borrow. The lending, after leading to a flow of exports without imports, would, when the interest was due, lead to an inflow of imports without exports. This has been so in rich countries like England, France, Belgium; not so in Austria, which has never become a creditor State. When a country with little capital of its own is turning to manufacture, it must borrow the capital; and the capital must come

[1] See ECONOMIC JOURNAL, June 1920, p. 214 seq.
[2] Obituary, *ibid.*, December 1914, p. 648.

in the form of goods, creating a "passive balance." Austria is a poor nation aping the rich. The borrowing has gone on; the time of mere payment of interest has never come. When the time comes for the inevitable repayment of principal, we shall have our "active" balance again. At present we have wasteful expenditure, public and private, and unthrifty borrowing. "I know well enough that the official statistics of our foreign debt display no such high figures as are implied in the foregoing argument. But I know equally well that this branch of statistics has to work with uncertain data, leaving loopholes for omissions and errors. Moreover, a considerable part of the imported capital contributing to our passive balance can enter in a form escaping the meshes of our statistics of debt, namely, the form of private industrial establishments founded by foreigners in our own country" (p. 515).

Böhm was Finance Minister in 1895, 1897 and 1898, then in 1900 to 1904. He helped to convert the debt and to abolish the sugar bounty. He seems to have found some difficulty in carrying his colleagues with him. This article is the only one that betrays his feelings in office. The others are on the programme of the Austrian Economic Journal at its foundation in 1892; the Classical School; in various aspects, the theory of Value; Cost and Price, Demand and Supply. Like our own Alfred Marshall, he was aware of the drawbacks of free competition (pp. 475–480). Like Marshall, he cherished in all his devotion to study a warm desire for practical reform. Dr. Weisz has shown this side of him well, in the Preface (p. x), with many other lights on his hero's life and character. It appears that his first inclinations in youth were towards physical science (Preface, p. iii).

The portrait is a speaking likeness, adding greatly to the value of the book.

J. BONAR

Der Wirtschaftende Mensch in der Geschichte. Gesammelte Reden und Aufsätze. By LUJO BRENTANO. (Leipzig: Verlag von Felix Meiner. 1923. Pp. xii + 498.)

IN this collection of Lectures and Essays Professor Brentano addresses himself particularly to the young enthusiasts who take up the study of economics in the hope of finding a scientific confirmation of their preconceived ideas. These he warns that nothing is possible unless it is economically feasible, and that

nothing is economically feasible if it conflicts with the natural impulses of the " *Wirtschaftende Mensch.*"

From the point of view of this teaching there is something of a break between the first five chapters, which were published at intervals between 1888 and 1910, and the next six, which were published in book form under the title of *Die Anfänge des Modernen Capitalismus,* in 1916. This book was fully reviewed in the ECONOMIC JOURNAL of March 1920 by Dr. J. H. Clapham. As regards Chapters I to V, a certain amount of repetition, for which the author apologises in the Preface, is inevitable in a set of Lectures on cognate subjects given at intervals of time to different audiences. Thus the chapter on the " Economic Teaching of the Early Christians " repeats much that had been expounded in " Ethics and Economics in History," and the same doctrines reappear in later chapters with fresh emphasis. The whole exposition, however—admirably lucid and illustrated with Brentano's wealth of historical knowledge—makes most interesting reading.

Chapters II and III develop the main theme, *i.e.* that the most exalted ideals must fail to be realised if they conflict with elementary human instincts and neglect ordinary human needs. The Early Christian Fathers were professed Communists, who derived their views on poverty and riches direct from the Gospels. No one can serve both God and Mammon. Accordingly they preached poverty and self-denial; they condemned trade, which was inevitably instigated by the desire for the greatest possible gain, and which even at its best filled men's minds with anxieties and turned their thoughts from God. And they prohibited usury with the utmost severity. When trade in one form or another was seen to be inevitable, they tried to counteract its evil effects by the doctrine of the " Just Price."

Practice did not, however, altogether accord with precept, for the Church herself began to own property and to accumulate the very riches which she condemned. Poverty fled to the cloister, but the cloister too became contaminated. This explains the frequent founding of new Orders, as the old Orders fell from grace and abandoned their ideals of poverty and self-denial.

Even the precepts of the Church eventually grew more tolerant in regard to wealth and trade. The doctrine of the " Just Price " opened the door to a justification of profit, since the cost of production which regulated price could be held to include an allowance for the merchant's own needs. Thus Thomas Aquinas, who sought to reconcile Christian teaching with pro-

gressive economic development, admitted the justification of a "moderate profit" to be devoted to the upkeep of the merchant's house and to the support of the poor. He also allowed the dealer to charge more than the cost of the merchandise if the goods were worth more to him, thus introducing the very subjective elements which the doctrine of the "Just Price" aimed particularly at excluding. An ingenious device evaded the difficulty caused by the prohibition of usury. It was not permissible to charge interest on a loan, but a penalty clause could be inserted in the contract, which became operative if the money were not repaid by a given date. Thus the prohibition of usury was found compatible with a 60 per cent. rate of interest. This abuse was only rectified by a measure which legalised interest but limited the rate.

But it was the development of foreign trade which finally undermined the doctrine of the "Just Price." For in dealing with the foreigner, *i.e.* the enemy, no scruples held good, and it was clearly permissible to make the greatest possible profit out of every transaction. Once admitted, the "greatest profit" tendency crept from one set of circumstances to another, from foreign trade to home trade, from sale to manufacture, till it filled the whole picture.

Brentano traces two separate currents in the emancipation of economic thought from ethical teaching. The one is pagan and derives from Machiavelli, the other is Christian and can be traced to the Reformation. The Protestant religion does not bid man flee the world, but live in it and serve God to the best of his ability. Many of the Puritans were most successful exponents of this doctrine, and might almost be said to have solved the problem of serving two masters.

In the chapter on "The Church and the Development of Freedom," Brentano argues that personal freedom owes less to religious teaching than to economic necessity. To the early Christians, with their contempt for earthly joys, the lack of personal liberty seemed a minor evil. History shows that the Church did nothing to liberate the slaves, but, on the contrary, shared in the benefits of ownership. Slavery as an institution began to decline when it ceased to be profitable. It survived longest in the plantations of the United States and the West Indies, where slave labour was remunerative because supervision was easy, and the slave never had to be kept in idleness. In Mediæval Europe it paid better to *give* the serf the land farthest removed from the domain for his own use, and to require only a part of his services in return.

All attempts made in the past, Brentano concludes, to order Society in opposition to the natural impulses of men, have failed, and it would be idle to expect a different fate in the future. There is a tendency to-day for all men to look hopefully to legislation—the more favoured classes in the hope of finding protection for their privileges, the less favoured with the intention of securing a greater share of the world's good things for themselves. But positive legislation will not alter the nature of man. Brentano's advice to the idealist is to hold fast to his ideals, but to fight for them within the framework of necessity, in accordance with, not in opposition to, the laws of human nature.

H. REYNARD

Die Soziale Frage. By LUDWIG STEIN. (Stuttgart: Ferdinand Enke. 1923. Pp. xii + 592.)

THE origin of this book, the fourth edition of which has been dedicated to Lord D'Abernon, the British Ambassador to Germany—"to the scholar and not to the statesman,"—and the second edition of which was dedicated, by permission, to Herbert Spencer in 1903, lies in a course of lectures delivered by the author at the University of Zurich as far back as 1888. In its earlier editions it was translated into Russian, French and Japanese. It deals with the Social Question, considered in the light of Philosophy, not, as the author points out, in its narrow economic aspect, but as embracing within its ample folds "a whole bundle of other questions involving, for example, the religious, ethical, pedagogical, legal, political, æsthetical and, last but not least, international aspects of the social question." The scope of inquiry thus widened, there is not a social institution, not a social ideal, not a country, not a people, and not a period which the author does not review. It would be difficult to say whether it is a treatise on Social Philosophy, or Sociology, or the Social Question, as understood among English-speaking economists. The volume is a capacious portmanteau containing information on social phenomena and on social speculation from the remotest antiquity down to the present time. For over a generation the author has been piling up laboriously brick upon brick. The distracted reviewer, who had to make his way through this vast mass, feels that the author does not bear "all that weight of learning lightly, like a flower."

Some of his statements embody easy answers to questions which are still undecided. In future editions of his work it would

be better to give the English proverb, quoted on p. vii of the Introduction, in the form in which it is current among English-speaking people, and to correct a misprint in the spelling, on p. 31, of the name of a Heidelberg economist.

L. K. HYDER

Der Alkoholismus als Problem der Volkswirtschaft. By PROFESSOR DR. ROBERT WILBRANDT. (Stuttgart: E. H. Moritz. 1924. Pp. 55.)

R. WILBRANDT, Professor of Political Economy in the University of Tübingen, sums up in this booklet all the arguments by which he hopes successfully to support the Temperance Movement in Germany. During the Great War consumption of alcohol had fallen in Germany to one-fifth, so that lunatic asylums contained no sufferers from alcoholic diseases, and in prisons there were hardly any cases arising from drunkenness. But now the consumption of alcoholic liquors is again greatly increasing, and no legislative measures sufficiently effective are taken against these abuses. Professor Wilbrandt complains loudly of the German people in their present critical situation allowing their best strength to be devoured by the habit of drinking. The consumption of alcohol was estimated before the war at three billions of gold marks, *i. e.* 150 million pounds yearly, but might readily be put down at one-half more, taking account of the indirect damages caused by drinking (costs of police, administration of justice, hospitals). The production of alcohol requires in Germany as much land as is now in Württemberg and Hesse devoted to agricultural products. Alcoholism creates want, dearness and waste of energy, as more work could be done in proportion with less drinking. Wilbrandt is looking forward to an improvement of such conditions by getting the German youth to abstain from alcoholic beverages.

EUGÈNE SCHWIEDLAND

Doctrines de Saint-Simon. Nouvelle édition, avec introduction et notes par MM. BOUGLÉ et ELIE HALÉVY. (Paris: Rivière, 1924. Un volume, 8vo. Pp. 504.)

THE French Socialists of the nineteenth century, whose influence appeared to have been completely lost, have to-day come back into their own, at any rate in France. To what can this revival be ascribed? Is it a manifestation of nationalist

spirit, a reaction against German socialism, and is the change an unforeseen consequence of the battle of the Marne? Possibly, but a simpler explanation is to be found in the swing of the pendulum, which regulates the fortunes of economic theory with wearisome monotony. After half a century of absolute sway, the doctrines of Marx are beginning to lose ground, and the Bolshevist experiment does not seem calculated to restore their popularity. So we find a return to the doctrines of Marx's predecessors, which are not so logical or scientific but more humane, peaceable and idealistic.

With this change of public opinion, Proudhon and Saint-Simon regain their vogue. A large new edition of the complete works of the former is in the press, and we have here a new edition of the teachings of Saint-Simon—not the works of Saint-Simon himself, but the writings of his disciples, which in our opinion are much more interesting than those of the master. For although the school has kept the name of Saint-Simon with due reverence and will survive in history under his patronage, it is his successors Enfantin and Bazard, and especially the former, who are responsible for the influence which the school exercised over all the intellectuals of its age, and it is their influence which is being restored to-day.

It was not until four years after the death of Saint-Simon in 1825 that the famous "Entretiens," which are reproduced in this volume, began to be held every Wednesday in a modest room in the rue Taranne (now superseded by the Boulevard Saint Germain). There is no author's name, for the disciples desired none but that of the Master. As a matter of fact it would be difficult to attach a name to the lectures, for although most of them were given by Bazard, they were obviously inspired by Enfantin. The latter himself declared that he was "responsible for everything that has been thought and said in the teaching," and this statement, which is quoted in the Preface to the volume, though somewhat lacking in modesty, is nevertheless sufficiently accurate.

The "Entretiens" reproduced in this volume are seventeen in number, but only three of them deal with economic subjects, more particularly with the right of property. The others bear on history—in one of them we find the first concepts of a science of sociology to which one of the disciples, August Comte, was to give his name only a few years later—on education and on religion. They are outside the scope of this review.

With the views of the Saint-Simonians on property we are

familiar. They refuse to be labelled Communists, although they have been accused of deserving the title. Nor, however, will they admit the right of property in perpetuity, *i.e.* by inheritance. "Property owners and capitalists are trustees of the instruments of production, which it is their function to distribute to the workers" (p. 257). Clearly this formula contains the whole essence of collectivism, and leaves out nothing. It involves the abolition of the right of inheritance, not so much because a public function cannot be hereditary—it *is* hereditary in every monarchic or aristocratic State—but because so important a task as the distribution of the means of production cannot be left to the blind chances of heredity. There must be a properly constituted authority, competent to select the most capable workers, so as to entrust the instruments of production to those who are able to make the best use of them, and competent, moreover, to fit the right remuneration to the services rendered. This is expressed by the famous formula: "To everyone according to his talents; to every talent according to its achievement."

But how are we going to constitute this authority, which is to allot functions to the best advantage, put the right man into the right place, and, in short, realise in the economic world what every Government aims at establishing in the realm of politics and law? On this point the doctrine of the Saint-Simonians is not very clear. All that does emerge is that in the government of the future, bankers, engineers, scholars, artists and even priests—but priests of a new faith—will co-operate harmoniously, and that the new organisation will be neither political, nor military, nor industrial. Here Saint-Simon is ahead of Herbert Spencer, but I must confess that I cannot see how social forces so dissimilar and even antagonistic, at any rate in our age, are going to amalgamate. And even the lucid preface of Messrs. Bouglé and Halévy does not convince me.

For it must here be admitted that by far the most interesting parts of this volume are the editors' Preface of 60 pages, and the detailed notes which occupy almost as much space as the text. The editors are M. Bouglé, Professor of Sociology at the Sorbonne, and M. Elie Halévy, who must not be confused with his brother Daniel Halévy, also an author of repute. Their Preface glows with enthusiasm: they are not the type of disciple of whom Socrates is reported to have said: "How should he be able to understand me? he does not love me." But if love is the first condition of understanding, there is always a risk that it may over-rate its object. Our two commentators are

inclined to exaggerate the influence of the school of Saint-Simon. They would prove that it broke the ground and led the way to nearly all the later schools of social thought: not only to the Positivism of Auguste Comte, which is incontestable, but to the State Socialism of Rodbertus, to the Democratic Socialism of Louis Blanc, to the Communist International, and, at the very opposite pole, to the theocratism of Joseph de Maistre. But as Messrs. Bouglé and Halévy have themselves observed, this proves too much. Breadth and diversity in a school of thought may argue fertility, but they also spell failure. To be everywhere means to be nowhere.

The editors lay particular stress on the fact that Saint-Simonism is a "socialism of producers" (the Review which for several years was their special organ was entitled *Le Producteur*), and so opposed to the classical political economy, which adopts the standpoint of the consumer. "Their social system approximates to one of the features of our modern organisation—the great Trust, of which the Saint-Simonians appear to have been the prophets." This characteristic indeed best explains the renewed vogue which the school enjoys. The social conception of the great German industrial magnate Rathenau is identical with that of the Saint-Simonians, and only three years ago a group of French business men founded a Review which they named *Le Producteur* in order to make the connection unmistakable.

There is one modern social school, however, which refuses to follow Saint-Simon in this respect, *i.e.* the Co-operators. While differing absolutely from the liberal Economists on all other subjects, the Co-operators agree with them in maintaining the supremacy of the consumer and the subordination of the producer in the economic order. Like Adam Smith, they hold that every Association of producers is more or less against the public interest. This school, on whose behalf we have struggled for half a century, has the honour of counting Professor Bouglé among its disciples, or at any rate its friends. We should therefore have wished to find in his Preface some exception to this aspect of the doctrine of the Saint-Simonians. When these designate consumers as idlers who levy a tithe on the producer, as mere drones in the hive, they are obviously confusing the consumer with the stock-holder. The man who lives on the interest of his capital might be considered a parasite, but to apply this term to the consumer is nothing short of absurd.

CHARLES GIDE

The Economic Development of the British Overseas Empire. By L. C. A. KNOWLES. (London: Routledge & Sons. 1924.)

PROFESSOR LILIAN KNOWLES, in dealing with the economic development of the British Empire in connection with the new Bachelor of Commerce degree at the University of London, found no little difficulty from the absence of available books to which she could refer her pupils. She therefore acted upon the saying of her master, Dr. Cunningham: "If you want a subject to live, you must write a text-book for it." There can be no question as to the admirable manner in which she has fulfilled her task. Dr. Knowles possesses two gifts, not often found together—the gift of happy generalisation and the gift of the faithful presentment of details. Occasionally the generalisation may be a bit too bold, as when the "Chief cause underlying the Great Trek" of the Boers is said to have been the abolition of slavery, or when we are told that the feeling aroused by Asiatic immigration "actually caused the federation of the Six Australian States"; and that "the founding of Australia was an attempt to give gaol-birds another chance."

Nearly always, however, the generalisations are extremely suggestive and stimulating to the reader. "The primary method of British colonisation is road-making, whether it be an ordinary metalled road or a railroad. . . . Like the old Romans, the English are essentially road-makers, and for much the same reasons, namely, law and order." "There is an inscription let into the pavement of Seville Cathedral to commemorate Columbus which says: 'To Castile and Aragon he gave a new world.' The work of researchers into tropical diseases, the work of administrators in carrying out their recommendations, has verily been to give a new world to mankind and to increase its powers and potentialities." Again: "In India British rule had to play the part of a universal provider and special providence"; whilst concurrently "modern security means modern taxation." "Something for nothing is not to be obtained by India any more than by any other part of the world, and yet that is what the English are always being asked to produce in India." Enough has been quoted to show that the volume does not suffer from heaviness of touch; it remains to give some explanation of its scheme.

The first book deals with "the Empire as a whole." The stages in development are given as follows: (1) an Empire of

outposts, 1598–1763; (2) Continental inland expansion, 1763–1870; and (3) the British Empire as a world Power, 1870 to present day. We next find a short but masterly sketch of the economic divisions of the Empire and their population. Stress is laid on the existence of two separate types within that Empire. The dividing line is that certain regions are an expansion of Western civilisation and are free to direct their own economic life, whereas "the other Empire, lying mainly in the tropics and sub-tropics, though influenced vitally by the West, still in essence retains its own civilisations, but is under Western guidance in economic matters." An account is then given of the old colonial system, 1596–1763, and of the new Empire with its changes in commodities, motives and methods of expansion. The section on financing the Colonies is of especial value, whilst the least notable portion of the volume is that dealing with the old colonial system, ground that has carefully been made good by Mr. G. L. Beer and other writers.

Dr. Knowles is now in a position to approach the main theme of the volume, "The British Tropics." But before dealing with India, Malaya, Nigeria, Kenya and Uganda in detail, it is necessary to discuss certain general problems, such as the effect of new cultures and new demands; the protection of the natives; agricultural development; education and finance, and tropical medicine and sanitation. All these subjects are dealt with lucidly and well; and one is especially struck by Dr. Knowles's detached and philosophic attitude in treating such thorny questions as Indian immigration into South Africa and Kenya. The two hundred pages that deal with British India are a veritable compendium of useful matter, presented in a most attractive manner.

In short, the merits and attractions of this volume justify the hope that before long we may have its successor, which will deal with the Dominions and the self-governing areas.

As a new edition of the work will doubtless soon be required, it may be noted that in the text, references and index Sir H. Johnston's name is always misspelt, whilst the *t* of which he is deprived is given to Lord Blachford.

H. E. EGERTON

Every-day Life on an old Highland Farm. By I. F. Grant. (London: Longmans, Green & Co. 1924. Pp. x + 276. 12*s.* 6*d.*)

Whether viewed from the varying standpoints of the economist, the historian, or the reader of general literature, this will be judged an admirable work. Miss Grant has done considerable service to the two first classes, and has already earned warm praise from reviewers writing on behalf of the last. This connotes much skill, for it is admittedly difficult at one and the same time to interest the casual reader and to retain unimpaired the technical value of such a treatise. Nothing would have been simpler than to publish the account-book of William Mackintosh of Balnespick for the years 1768 to 1782 exactly as it stood, and in less fortunate circumstances this might have proved the wisest course, but Miss Grant had the capacity—and has utilised it to the full—accurately to investigate the contemporaneous economy of this Highland district, and has thus converted a bare record into a valuable contribution to economic history. In the process she has thrown much light on such questions as the relationship of the tacksman to his landlord and his sub-tenants, the allocation and distribution of plough-land (frequently runrig) in a mainly pastoral country, the survival of payment in kind and by service, the incidence of different charges on land, and the development of rotational systems. It is certain that numerous similar records exist and will eventually come to light, but, if one were permitted to select the areas from which they should be drawn and postulate the period of time they should cover, this particular district and these very years would certainly be among the first examples called for. For, as Professor W. R. Scott remarks in his Preface, this was a time when Scottish agriculturists were still following many customs which the French war was soon to sweep away and make room for the improvers, whose work was nowhere more needed, or, in the end, better rewarded than in Scotland; further, both locality and period are closely associated with the work of Adam Smith.

If an agricultural economist were asked to record his main impressions after reading the principal chapters, which deal with the methods of farming and the standards of rural life, he would probably reply that the microscopic scale upon which arable farming was carried out and the terrible climatic disabilities endured had most struck his imagination. Taking the

latter first, after every allowance is made for differences in latitude, persons familiar with twentieth-century village life in Southern England will gasp when they read extracts such as the following :—" From the 13th April to Friday 19th yr was no plowing nor sowing till the 22nd, with snow and drift. Tuesday 16th being the coarsest day ever seen, noe beast would go outdoors, dry wind and frost nights from 22nd April till 4th May." The land was clearly unapproachable throughout at least six months of the year, and at the mercy of snow and frost for another two, yet the inhabitants were dwelling in " houses " often greatly inferior to modern cattle-sheds, and they were penurious to a degree that can best be appreciated by reading of their efforts to sell, in distant towns, such humble commodities as a " kid for sixpence or eightpence," or a " few pennyworths of cheese."

In reference to the small scale upon which work was carried out, it will suffice to record that the farm carts were scarcely larger than present-day wheelbarrows, and were drawn by correspondingly minute and badly nourished horses. The latter, even when judged by the standards set by modern small-holdings, were unnecessarily numerous and therefore not economically employed. Naturally, the small and scattered patches designated " fields " added a further handicap, nor had the new drainage system inaugurated by Smith of Deanston yet made its contribution towards facilitating cultivational operations. Despite all these drawbacks, the inhabitants of the Davoch of Dunachton were not retrograde farmers. Potatoes were mentioned as early as 1774, flocks of Southern sheep were already being introduced when the account-book commenced, and grass-seed was referred to in 1770. It is unnecessary to add that these people were industrious to a fault. Is it to be wondered at, however, in view of what has been said in a previous paragraph, that the word " whiskey " figures so frequently in descriptions of their social gatherings ?

The book concludes by giving several excellent maps showing the distribution of land and crops at different dates. These, taken in conjunction with the previously mentioned data relating to outgoings, rentals and yields, present a composite picture of the economy of the parish. Comparison with southern, and especially with East Anglian, conditions existing in a similarly defined area at the same period affords striking evidence of the divergence between the practices followed, and, incidentally, of the overwhelming superiority of the human standard per-

taining in the south. It is much to be hoped that Miss Grant may discover and publish further records of her careful and far-seeing ancestor; may it be suggested that, in this case, she will add to her readers' debt by including an index?

J. A. VENN

European Bankruptcy and Emigration. By HELMER KEY, D.Ph. (London: Methuen and Co. 1924. Pp. 169.)

"I CONSIDER, roughly speaking, the condition of the continent of Europe hopeless and perhaps irreparable, unless the present reparations policy with all its many complications is soon modified. The only means of rescue, to my mind, is organised emigration from overcrowded Europe and a systematic colonisation of considerable dimensions of the still unexploited parts of the world." This is the main theme of Dr. Key's interesting little book. The war has "practically ruined" Europe, since it has disturbed those economic equilibria upon which its prosperity depends to an extent only adjustable in terms of a wholesale redistribution of man-power. This is to serve a fourfold purpose. It will help to solve the problem of unemployment in such countries as our own; it will restore the balance of exchange between new countries and old ones, by increasing the production of raw materials from the former and the demand for the manufactured products of the latter; it will relieve Europe of its surplus womanhood and Europe's colonies of a corresponding shortage; and it will safeguard the economic future of the white races by preventing the Pacific Ocean from becoming a *mare clausum* for the yellow.

This bold and far-reaching thesis was developed originally in a series of articles in the *Svenska Dagbladet*, and its presentation has both the merits and the drawbacks derived from its journalistic parentage. Well-informed, clear and emphatic in statement, Dr. Key writes as a realist and, we believe, with a just appreciation of economic and political values. But the sweeping character of his statements must (as is perhaps intended) challenge criticism, his facts are but slightly documented, and he strives a little too eagerly after the attainment of an artistic unity in the presentation of his views.

English readers will be especially interested in what Dr. Key has to say about emigration within the Empire. His opinions are not novel, but they acquire a fresh cogency from the context in which they are put forward. "Great Britain is at present

over-populated, and there is little possibility of using the surplus in her industries or otherwise. At the same time the dominions are under-populated . . . there is everywhere a great shortage of labour for the normal progress of work." The under-population of Australia in particular fills Dr. Key with alarm; the restrictive policy of the Trade Unions towards the immigrant labourer is, he thinks, short-sighted and calculated to defeat its own ends, while the policy of a "White Australia," as at present formulated, is doomed to failure, since the logic of physical and political geography is against it.

Other passages worthy of attention are those in which Dr. Key discusses the future of South America, the "imperialistic" policy of the United States, and the (dismal) prospects of de-capitalised Russia. His opinions are not calculated to cheer up many of us. For ourselves, we have little faith in emigration as a panacea in the absence (so marked in our own country) of the "will to emigrate." But to those who wish to encourage the "will to emigrate," by methods more up-to-date than the religious persecutions and the reports of gold discoveries which have at different times proved efficacious, we especially commend this candid and well-written book.

H. Phillips

Expenses, Profits and Losses in Retail Meat Stores: How Much and Why. By Horace Secrist, Ph.D. (Chicago, Illinois, 1924. Pp. 70. $1.)

This is one of the third series of pamphlets published by the Bureau of Business Research of the North-western University School of Commerce (Chicago), which is under the direction of Professor Secrist. Series I consisted of two short pamphlets on the Book and Job Printing Industry and on Wholesale Price Movements of Paper in Chicago; Series II contained nine pamphlets or books relating to Retail Clothing Stores; Series III, of which No. 10 is before us, is devoted to the Retail Meat Trade. The researches have now extended over four years.

The field of investigation is a new one. Very little is known about the mechanism or finance of retail dealing, and economists and statisticians who have wished for definite knowledge about them have been deterred by the very great difficulty of getting any trustworthy information. Whether American dealers are more willing to disclose their accounts than are English, or whether the Bureau of Business Research has greater initiative

or larger funds than investigators here, we do not know; but in fact a mass of the most confidential information has been obtained both from the Clothiers and the Meat Dealers. The latter in many cases had initially no adequate system of account-keeping, and an early step taken by the Bureau was to instruct them how to ascertain and present to themselves the pecuniary facts of their own business.

The presentation in these series is ultra-statistical, and the literary matter consists to a great extent of head-lines, italics and numerical statements. A fair sample is:

"WHAT IS THE RENT BILL AS A PER CENT. OF SALES IN RETAIL MEAT SHOPS?

Typical Amounts for All Stores.

If this question is answered for the shops studied without considering differences between cities, size of store and results of operation, the average figure is 2·22 per cent. The most common amounts ranged from 1·50 to 2·25, and the middle 50 per cent. between the highest and lowest fell between 1·30 and 3·36 per cent. of sales." The problem in statistical method underlying this sentence is the familiar one of expressing a frequency group by means of a few selected and defined terms. The 1·30 and 3·36 are the quartiles; the "1·50 to 2·25" is related to the mode, and appears to correspond to a "modal-region" used, but not very clearly defined in Series II, No. 9. Either a short table or frankly technical terms would show the distribution more clearly. The statistical tables given in the Appendix are perhaps too complicated in expression or too full of rather technical detail for the ordinary reader.

Alike to a theoretical economist or to a statistical observer, who has the patience to master them, these reports are of first importance and of great interest. They are to be recommended especially to every writer and teacher who uses the phrase "representative firm"; and if the man in the street, who complains of the expense of distribution and of retailers' high profits, could be induced to study the table of Chicago meat-dealers' profits and losses, the Royal Commission on Food Prices would have no function. For example, if we take two-man stores (which are the common type), in 93 cases out of 456 expenses exceeded receipts, in 58 the two were practically equal, while in 305 receipts exceeded expenses. All together the net trading profit was only

2·8 per cent. of sales. In expenses is included about $50 weekly for the proprietor's wage if he is actually working.

Though the necessity or custom of setting up a butcher's shop within a short distance of customers involves the existence of many with too small a turnover to be economical, and consequently the small shops are often unremunerative, this circumstance does not explain the generally low range of profits, which is attributed to inefficiency and ignorance on the part of the proprietors. Part of the work of the Bureau is educative; by analysing the conditions which make for failure or for success and publishing these pamphlets, it is hoped to train retailers to understand their own business.

A. L. BOWLEY

NOTES AND MEMORANDA

The Sale of Corn in the Nineteenth Century

Professor Fay's researches into the methods of selling corn in the nineteenth century (Economic Journal, XXXIV, pp. 211–218) are so admirably suggestive that one cannot refrain from elaborating his story, even though it may entail the addition of mere corroborative detail to a narrative which is sufficiently convincing.

In the middle of the eighteenth century, while other English markets were selling by measure, Liverpool was selling by weight; and though this step had probably been taken in order to adjust the unit to the Irish barrel of 280 pounds, it is doubtful whether the adjustment would have become permanent had it not been for the presence of certain favouring causes: as a corn market Liverpool did little business in English grain, and was unfettered by tradition; and when the need came for purchasing corn from sources outside Ireland, the process of buying by measure and selling by weight could be made, with careful management, a profitable business. Wheat was bought in quarters from the south of England, in Winchester bushels from North America, in lasts from the Baltic, and all was sold by the bushel of 70 pounds at Liverpool. "If you can furnish me with some good white or mixt wheat not exceeding F 420 to 430 per last," writes a Liverpool merchant to one of his Baltic correspondents in 1768, "you may send me twenty to twenty-five last in bags. The heaviest is most suitable for this market, all wheat being sold here by weight." [1]

Sale by weight spread through Cheshire, Staffordshire and Shropshire; but uniformity of system did not bring uniformity of measure. The most obvious case of difference occurred at Chester, where, in spite of its proximity to Liverpool, business was done on the basis of a bushel of 75 pounds, and, save for a brief interval which will be noticed, was so carried on until recently.

The introduction of the "cental," in 1859, was a bold stroke

[1] Letter from William Rathbone to Trevor Corry, of Dantzic, March 29, 1768. Private MS.

aimed at removing existing anomalies by instituting a new unit rather than by favouring one of those in use at the expense of the others. The story of the cental is, in fact, the complete history of the ineffectual attempts during the century to achieve uniformity, seen through a reducing glass; the arena is local instead of national, and the attacks are launched through the resolutions of traders instead of the recommendations of Parliamentary committees. A broker's circular of 1858 expressed the pious hope "that the resolution passed at our Corn Market to sell every species of Grain, Flour and Wheat by the 100 lb. weight from the 1st February next will be generally adopted by the country, and thus do away with the confusion arising out of the present multiplicity of weights and measures."[1] The attack was well planned, and was made with all the forces available: efforts were made to cultivate opinion in other markets, both at home and abroad; even "corn tables" or "ready reckoners" were prepared and published in advance. The English markets, however, were against the change. In the polite language of a memorial issued by the Liverpool traders, it was heard "with regret that at Glasgow and elsewhere the 'cental' had not been received with that unanimity which had been generally anticipated."[2] On the other hand, they were able to congratulate themselves on hearing from New York and Montreal, "by letters and circulars received per mail steamer . . . that the cental had already been adopted in those cities;"[3] while at Liverpool itself, although the town bakers were in open opposition, nine-tenths of the merchants and brokers were reported to support the change.

On the surface everything went happily for five months, and all quotations for grain and flour were duly made by the cental. Then flour and oatmeal were again quoted by the sack of 280 pounds and of 240 pounds respectively, in which actual business had been transacted all the time. Little wonder that the bakers objected when they bought sacks of flour of the same weight as formerly, yet were supposed to bargain in terms of a unit that was precisely five-fourteenths of a sack![4] Three months later, Indian corn and rye went back to the quarter of 480 pounds,

[1] Messrs. Stolterfoht, Sons & Co.'s Weekly Circular, December 10, 1858.

[2] Gore's *Liverpool General Advertiser*, February 17, 1859.

[3] *Liverpool Mercury*, February 16, 1859.

[4] It would be interesting to speculate as to what part was played by the requirements of the retail trade in the retention of the sack of 280 pounds. It is rarely, if ever, the case that a miller packs a bag of flour which is not a multiple of the 7 pounds favoured by the private consumer.

beans to the Imperial quarter, and peas to the quarter of 504 pounds. Another month, and barley and malt were once more quoted in Imperial quarters, foreign barley by the bushel of 60 pounds, and oats by the bushel of 45 pounds, so that at the end of the year only wheat remained measured by centals.

The defeat of the cental, on all fronts except one, may appear extraordinary, but it permits of explanation. Barley and malt do not lend themselves to sale by weight, but foreign barley is used chiefly for grinding, and its cheapness makes sale by weight possible. Wheat was bought in large bulk, so that the change from a bushel of 75 pounds to a cental of 100 pounds represented a slight gain in simplicity. Other grains were bought in smaller bulk; it was convenient to buy them by the sack, and antipathy to change secured the retention of sacks of the usual capacity.

The situation remained unaltered for twenty years, until the next effort in 1879. This time two other markets, Chester and Manchester, were induced to follow Liverpool's example. But Chester was a market mainly dependent on English supplies, and it is occasion for little surprise that a month sufficed to bring about the failure of the innovation. It lingered on for a year, it is true, for business in Egyptian beans and Indian corn, chiefly because the supplies of these were drawn from Liverpool. The Manchester market was less independent, and there the course of events ran parallel with that at Liverpool. The unit of 100 pounds again applied to all grain and flour, with the sole exception of malt, which, it was now recognised, must be sold by measure. Again the first defection occurred with flour, though only at the end of four years; but oats and barley followed, until dealings in the cental were confined to wheat, maize and peas.

Nowadays, though there are probably few who would fight for the maintenance of the cental in preference to any other standard of weight, the market does seem to be awake to the futility of conflicting measures, and to the waste of time entailed by the use of tables—as is sometimes necessary—in the simple matter of comparing prices. A movement towards reform is overdue. Maize is quoted in centals; wheat options are quoted in centals; but spot wheat is commonly quoted in quarters—a quarter of 480 pounds for foreign wheat, of 504 pounds for English. Some descriptions of oats are sold by a unit of 320 pounds, others by one of 336 pounds; similarly, barley is sold by one of 400 pounds and another of 448 pounds; while offal, which used to be sold by the ton, is now, as the result of an effective war-time change, sold by the hundredweight of 112 pounds. Taken

separately there is justification for each. Viewed in the aggregate it is a curious and illogical assortment.

One follows Professor Fay in raising the same concluding questions. "How," he asks, "was a big market like Liverpool able to sell by weight before the days of grading?" He is of opinion that since the grain was weighed in sacks containing so many bushels, Liverpool was, in reality, using a "weighed measure." This may have been true, but it can hardly be the whole answer to the question. A check of so crude a character would be insufficient to facilitate any large volume of dealings. Before the coming of grading in a highly organised market dealings are only made possible by the use of samples, whether on a basis of sale by weight or by measure. The weight of a sack of given capacity would indicate the natural weight of the grain, but only the sample would tell its colour and dryness. The weight of the sack would roughly determine the quality, but in the hand of the expert the sample would give, with sufficient accuracy, both quality and condition. It was stated in 1821 [1] that samples were submitted of all the corn sold at Liverpool, foreign as well as English. Evidence was given to the same effect before the Committee of 1834; the eye, the nose and the hand were necessary, it was said, in judging the value of grain, and the dealers could determine its specific gravity "by merely taking up and poising a small quantity of it in their hands." [2] Where, then, there was an agreement that the bulk should agree with the sample nothing more would be necessary to the smooth operation of business, unless it were arbitration. Indeed the reference of disputes to disinterested third parties, which obtained in 1834,[3] shows that even this was close at hand. It must be remembered that there was a wide classification of grain, more especially of wheat, even before grading proper was introduced. There were prime, medium and inferior reds and whites; there were English, French, Russian and American wheats; the latter subsequently comprising specialities such as Chicago, Milwaukee, New Orleans and Philadelphia, each with its own range of qualities, which were reported when the bulks were sampled on arrival. And, judging from statements in Prices Current and Circulars of the period, the millers made their selection with care and deliberation.

"But how did Ireland or any other place get on with sale by

[1] Committee (H. of C.) on Petitions complaining of depressed state of Agriculture, 1821. Evidence of Mr. David Hodgson, p. 283.

[2] Committee (H. of C.) on Sale of Corn, 1834. Evidence of Col. Pasley, R.E., Q. 3230.

[3] *Ibid.*, Evidence of Mr. J. Sandars, Qs. 1503–1504.

weight only?" It is true to say that Ireland was mainly a producer of oats, in which variation matters little; or it may be said that Irish wheat was of relatively poor quality, and that the price range would be a narrow one. But these partial answers can be supplemented by some consideration of the peculiarities of Irish marketing. In Dublin and Belfast there was a certain amount of sale by sample, but the Irish farmer generally took the bulk to market and there negotiated its sale with the factor.[1] Add to this the fact that in some districts the grain was rarely either weighed or measured by the farmer before it was taken to market,[2] and it is clear that under these conditions the sale of any grain by weight alone would present no special difficulties beyond the protracted higgling between buyer and seller. In the conduct of the export trade it was usual for the Irish merchant to submit samples and to contract that the bulk should correspond with the sample.[3]

STANLEY DUMBELL

THE COMMONWEALTH BANK OF AUSTRALIA

EXCHANGE difficulties and a local financial stringency have concentrated attention upon the banking system of the Commonwealth during the past year. As a result some important modifications of the constitution of the Commonwealth Bank have been carried through the Federal Parliament and the Bank has entered upon a new phase of its development. It was originally established by act of Parliament in 1911 for the purpose of carrying on the ordinary functions of banking as a State institution. The year before the Commonwealth Note Issue had been established and placed under the control of the Treasury. Up till the present the note issue has been independent of the Bank, though the exclusive control of the Treasury was modified in 1920 when a Note Issue Board was set up and the additional and important provision enacted that notes could be issued against trade bills with a currency of not more than 120 days. Little advantage was taken of this provision largely, according to the Commonwealth Treasurer, because the Notes Board was not associated with the Bank.[4] Other difficulties arising from

[1] Committee (H. of C.) on Sale of Corn, 1834. Evidence of Mr. William Christian, Qs. 2252–2255; and of Mr. David Roche, M.P., Q. 2143.

[2] *Ibid.*, Qs. 1485–1497.

[3] *Ibid.*, Q. 2453.

[4] Parliamentary Debates, 1924, No. 11, p. 1269. Much useful information upon banking in the Commonwealth is given in this speech made by the Treasurer when introducing the Bank Bill. See also the article by the present writer in the ECONOMIC JOURNAL, December, 1920, pp. 492–4.

the same cause appeared as the exchange situation developed during 1923 and 1924 and gave rise to a demand for a change in banking and currency policy.

Though deprived of the issue of notes, the Bank rapidly established a large business throughout the country and in the course of twelve years accumulated profits to the amount of £4,500,000. This success is due mainly to war finance operations, the Government business of the Commonwealth and the six States, and the Savings Bank business. The Bank has not been a serious competitor of the private banks. "Indeed, it is understood that the policy of the management up to the present has been not to enter into active rivalry with the trading banks. . . . It is fortunate the policy has been such as has been described because by reason of that policy the conversion of the Commonwealth Bank into a Central Bank has been rendered easier."[1] Hitherto the Bank has not acted as a central bank though its position was much strengthened during the war when it so greatly assisted the Government in floating war loans and financing the many special war-time commodity control measures.

In the past two years the absence of a central banking authority has been a source of weakness to the financial situation, and the policy of the Notes Board was such as to concentrate attention upon this weakness. The note issue reached a maximum of nearly £60,000,000 after the war and the Board sought to carry out a policy of deflation. Private banks, however, found it necessary to increase their credits, and the proportion of cash to liabilities reached the low figure of 18·5% in 1923. At the same time the favourable export season and the heavy borrowing abroad produced a favourable balance of payments and caused sterling to depreciate by comparison with the Australian unit. Banks found great difficulty in financing exports claiming that their London funds were plentiful while cash supplies at home were scarce. It was to meet this situation that the Government proposed drastic changes in the functions and management of the Commonwealth Bank.

Five important amendments were embodied in the bill introduced into Parliament in June last. These may be summarised as follows :—

(i) The appointment of a Board of Directors representing special commercial and industrial interests to control the Bank. (Hitherto control had been exercised by a Governor appointed by the Government, but acting on his own authority. The

[1] Parliamentary Debates, 1924, No. 11, p. 1277.

late Sir Dennison Miller was the only Governor to act under this arrangement.)

(ii) The abolition of the Notes Board and the control of the note issue by the Bank.

(iii) The strengthening of the Bank by the provision of further capital.

(iv) The granting of power to the Bank Board to fix and publish discount rates.

(v) The provision that the private banks should settle their exchanges through the Commonwealth Bank.

Other proposals such as that for the creation of local boards of advice, or the provision for two "currency experts" upon the Board whose endorsement was necessary for any change in currency policy, were abandoned in the face of keen opposition in Parliament. All the above measures, however, were carried through and they constitute a new charter for the banking system of Australia. By compelling private banks to use cheques upon the Commonwealth Bank for settling their clearing house operations, it is hoped to strengthen the position of the Bank. Capital to the amount of £10,000,000 is to be provided through the issue of debentures for £6,000,000 and the appropriation of £4,000,000 from accumulated profits. The policy of the Bank is handed over exclusively to the new Board which also has complete authority over the note issue. No conditions as to policy are prescribed in the Act; though the Treasurer indicated that the Bank might develop important re-discount operations. He anticipated that the private banks should be able to procure sufficient cash from the central bank during the export season to enable them to accept their customers' bills. "One of the most important functions of a central bank," he claimed, "is that of re-discounting, by means of which, under all ordinary circumstances, every other bank is able to convert its bills of exchange into legal tender money." Approval was given of the proposals of the Imperial Conference of 1923 for an exchange standard in the Dominions, but no special provision was made in this direction.

The Bank Board has now been appointed and its first declaration of policy is a reversal of the deflationist attitude of the Notes Board. As a result of a conference between the private banks and the Board an announcement has been made that additional currency will be provided to finance the exports of the summer and autumn. The terms of the arrangement are as follows :—

(i) The wool and wheat exchange to be partially pooled upon a basis to be agreed upon after allowing for the varying incidence of the several banks' businesses, the Commonwealth Bank taking its share.

(ii) The Commonwealth Bank to make available the required additional currency.

(iii) The Commonwealth Bank to act as a central institution to submit proposals for the allocation of the pool.[1]

This arrangement is to be regarded as a victory for the private banks, which desire not merely that more notes should be available, but also that the Commonwealth Bank should undertake its share in financing exports. The essence of the scheme is that private banks shall not find themselves short of cash through discounting bills, and it is an easy matter for a central bank controlling the note issue to provide the necessary currency when the exchanges are favourable. This may be regarded as a first step towards the creation of an exchange standard such as operated before the war when gold supplies varied according to exchange needs. Whether the Bank Board will proceed further by providing liquid funds in London against an adverse exchange is not yet clear. Such a situation will be met by special measures for the occasion, but should the Board contemplate any such arrangement it will complete the re-discounting functions of the Bank as a central institution. With the necessary funds abroad and the control of the currency at home the Bank could arrange to buy and sell exchange at fixed rates, and thus remove the disabilities under which industry and commerce have suffered through the inelasticity of the note issue and the exchange fluctuations of recent years. It is, however, too early to predict such a policy for the new Board which is proceeding cautiously in a difficult situation.

D. B. COPLAND

The University of Melbourne,
December, 1924.

NOTES FROM INDIA

(*From our Indian Correspondent.*)

IN the Indian Universities, amongst the subjects for the Arts degrees, Economics continues to grow in popularity. There are now twelve universities in India; and in nearly all of them Economics ranks next after English, which is in most universities compulsory, and History, in the number of students it attracts.

[1] Insurance and Banking Record, October 1924, p. 824.

There are about 140 teachers of economics and sociology in the various universities and the numerous colleges affiliated to some of them, of whom about seven-eighths are Indians, and the remainder Englishmen or American missionary professors. Great progress has been made in the last ten years in the provision of good libraries in the Indian universities; and many of them are now comparable with the libraries of the younger provincial universities in England. The immense mass of Indian Government publications of economic interest, to which must be added a selection of British Blue Books, is, however, a severe tax upon space. There has been a strong movement in recent years in favour of the realistic study of Indian economic conditions by undergraduate, as well as by graduate, students; and classes are taken to visit cotton mills, flour mills, large printing establishments, paper mills, sugar refineries, glass factories, or whatever kind of works may be available in the neighbourhood, employers being, almost without exception, extremely generous in affording opportunities for study, sometimes producing their wages and cost account books. Excursions are also made to villages to study agriculture and to see handicraft industries, lively or dying.

The Indian Economic Association held its eighth Annual Conference at Benares from the 4th to the 7th of January, 1925, at the invitation of the Hindu University. Certain subjects were selected for discussion, on which papers were specially invited, namely: (1) The Indian Tax System, Central, Provincial and Local; (2) The Taxable Capacity in India; (3) Central and Provincial Financial Relations; (4) Industrial Finance in India; (5) The Creation of an Indian Mercantile Marine. The predominance of Indian public finance is probably due to the widespread interest which this subject is now creating. The formation of an Indian Mercantile Marine is also a subject of lively discussion. India, in fact, is already launched upon a mercantile policy of the development of its resources and industries. Protection is an accomplished fact: perhaps public opinion will soon demand navigation laws, excluding ships not owned and registered in India from the coastal trade. Another noteworthy movement is the attention which Indians are beginning to give to the improvement of agriculture. The old school of thought which looked to the cessation of the "drain," and the reduction of the "burden" of land revenue for the economic salvation of India, is rapidly losing ground, partly through the influence of trained economists.

The Indian Journal of Economics, for some years published at Allahabad under the editorship of Professor H. Stanley Jevons, has recently been transferred to the control of the Indian Economic Association under an arrangement between the Economics Department of the Allahabad University and the Association, which provides for its continued publication at Allahabad, under a Board of Editors appointed by the Association. Since Professor Jevons left Allahabad in the summer of 1923, on his appointment to the new chair of Economics in the University of Rangoon, the *Journal* has been edited by Mr. C. A. Warburton, an American missionary economist from Cornell University, who was also Lecturer on Economics in the University of Allahabad. Mr. Warburton, who contributed a series of thoughtful articles on Distribution to the *Indian Journal of Economics*, has just resigned and returned to the United States for family reasons. His energy, and his intimate knowledge of financial statistics, American, European and Indian, will be much missed in India.

Economic questions are coming more and more to occupy the attention of the legislatures and of the Governments, Imperial and Provincial. During the session of the Legislative Assembly last September several Indian members demanded that the Government of India should undertake a comprehensive economic survey throughout the country. Admittedly this would be a gigantic undertaking; and it is not surprising, considering how conditions vary in different parts of India, that the Government fought shy of assuming responsibility for such an inquiry, which would need a large staff of paid investigators whose accuracy and impartiality it would be hard to guarantee. Mr. Calvert, whose book on *Rural Wealth and Welfare in the Punjab* is a noteworthy study of economic conditions, pointed out that some of the provincial Governments have already undertaken such inquiries, even if in limited scope. The Bombay Government has its Labour Office, doing splendid economic work under the direction of Mr. J. Findlay Shirras; and the Punjab Government several years ago appointed a Board of Economic Inquiry, of which economists in the Punjab were members, and which devoted its attention to measuring the rise of the cost of living and to detailed studies of the economic life of certain villages. The Government of India thought it best to leave the organising of economic inquiries to the provincial Governments; but the other provinces do not seem particularly anxious to respond.

The United Provinces, it is true, has just concluded an industrial survey which provides a complete view of the cottage industries, and particulars of sources of raw materials; and Burma is about to organise an inquiry into conditions of labour, and perhaps will establish a permanent Labour Office. These, however, are not inquiries into the general welfare of the people, such as the Indian members of the Legislative Assembly desire.

One reason that the Government of India gave for refusing a general inquiry was that they had just appointed a Taxation Inquiry Committee, which would not only review the whole of the Indian tax system with a view to redressing such inequalities of incidence as might be disclosed, but must necessarily for that purpose investigate the economic conditions of various classes of the people. This Committee was not appointed by the Assembly; and Indian political opinion disapproves of its constitution as appointed by Government. Sir Percy Thompson, Deputy Chairman of the Board of Inland Revenue, has come to India at the invitation of the Government as an expert member of the Committee. As Government will not appoint the members desired by the politicians, a certain amount of non-co-operation with the Committee is expected. However, the Committee has set to work collecting available statistics and other material, and has announced its intention of circulating a questionnaire based upon a preliminary review of available information. It is said that the members of the Taxation Inquiry Committee propose to attend the conference of the Indian Economic Association at Benares.

It was announced in the September session of the Legislative Assembly that the Government of India had appointed a Committee to consider the question of the flow of capital into India from external sources. This "External Capital Committee," as it is called, is now at work and has circulated a questionnaire. The questions are somewhat vague and much too sweeping in their scope. They indicate clearly enough, however, what was indeed evident from the speeches of members of the Legislative Assembly, that the main object of the Committee is not to discover ways of inducing foreign capital to flow into India, but rather to seek means whereby some discrimination in favour of Indian capital may be made. There is not unnatural jealousy

of the fact that nearly all profitable industrial undertakings, other than cotton mills, are under the control of European capitalists. The European managing agency firms obtain concessions for minerals, and the Indian public has no chance of subscribing for shares until the firm which develops the concession has taken a considerable profit. Some Indian publicists favour legislation requiring that concessions be not given to any companies which have not got a majority of the shares subscribed by Indians. It remains to be seen whether the Committee can be induced to take this shortsighted view.

Meanwhile the flow of capital to India for the development of her commerce and industries is unquestionably hindered by the instability of exchange, and the absence of any declaration of policy on the part of the Government. Lately exchange has had a firm tendency, and has been fluctuating at about 1*s.* 6*d.* This corresponds with a gold value of the rupee of slightly over 1*s.* 5*d.* The question whether exchange will rise further, or will weaken, depends almost entirely upon the policy of Government in expanding or contracting the paper currency circulation. The plan now adopted is perfectly sound and is capable of maintaining exchange in the neighbourhood of any reasonable figure which Government may decide on. Within the last few months the Secretary of State has sold Council bills on behalf of the currency reserve, the proceeds being invested in sterling securities, and a corresponding issue being made of Indian currency notes. The total of sterling securities now stands at 160 millions of rupees, and it may be increased; but the probability seems to be that the requirements of the export season, mainly cotton and rice in January to March, followed by wheat and linseed, will be met by the issue to the Imperial Bank of India of notes to the maximum of 120 millions of rupees against bills of exchange.

The exchange problem is rapidly becoming a political question. Two private member Bills have been tabled for the forthcoming session of the Legislative Assembly, one proposing simply to fix the valuation of the sovereign at Rs. 15, instead of its present legal value of Rs. 10, which is inoperative. This would bring exchange down to about 1*s.* 5*d.* at once; and it would then fluctuate in accordance with the sterling-dollar exchange. The other proposal goes further, and seeks to put the currency definitely on the basis of the gold standard. Gold coins would

be the only full legal tender and silver coins would be of limited legal tender. The paper currency would then represent gold, and not merely silver rupees, which are in effect now token coins. This would be a sound system of currency, excepting that the rupee could not be made limited legal tender within any period worth contemplating. A further provision of the Bill restricting the securities portion of the Paper Currency Reserve to Indian securities is thoroughly unsound. The purchase of sterling securities for the Reserve in times of highly favourable balance of trade is an essential means of regulating exchange, and providing currency in India. Both of the Bills are sure to be opposed by Government. Their interest lies in the fact that private members are beginning to take the initiative as regards currency reform. Both hail from Bombay, which, with its trade dominated by the export of cotton, and its cotton mills fearing the competition of Manchester goods, wishes to see exchange lowered to 1*s.* 4*d.* Calcutta, on the other hand, is dominated by the import trade and remittance of profits, and wants exchange to rise to 1*s.* 8*d.* at least. Indian public opinion will probably side with Bombay; so that a reversion to the pre-war standard seems likely to be the outcome of the controversy now beginning. H. S. JEVONS

SECOND ANNUAL CONFERENCE OF TEACHERS OF ECONOMICS

THE second annual Conference of Teachers of Economics assembled at Trinity College, Cambridge, on Friday, January 2nd, and continued its deliberations over the Saturday and Sunday. Between fifty and sixty teachers, drawn from a score or so of teaching institutions, participated, and excellent arrangements were made by the College authorities to accommodate the majority of these in Trinity. It was generally felt that, both in its (comparatively) formal, and its purely informal, aspects, the Conference represented a distinct advance upon that which met at Oxford last year.

The proceedings opened with a paper by Mr. H. L. Beales on the teaching of Economics to extra-mural classes. Mr. Beales, in common with most of those who spoke after him, devoted himself primarily to the problems of the Tutorial class. A full discussion followed his paper. Professors Clay, Gray and Daniels, Dr. Heaton, Messrs. Macdonald, Morgan Rees, Patterson and King were among those who took part.

At the second session, on Saturday, Mr. Phillips opened a discussion on Family Endowment. His aim was to suggest the

conditions of a practicable scheme and to invite examination of its economic implications. An extra session on Saturday night was devoted to the discussion. To this, Professor Bowley, Mrs. Stocks, Sir William Beveridge, Professor Unwin, Mr. Shove, and Professor Clay made notable contributions.

At the afternoon session on Saturday, Mr. J. F. Rees read a paper on "Research, with reference to Higher Degrees." His inquiry, as to why so little research into purely economic problems is undertaken in our Universities, is one that appears to demand an answer. Subsequent speakers devoted themselves mainly to criticism of the Ph.D. degree, which, among economists at least, would seem to have very few friends.

Sunday's proceedings were quite informal in character. Sir William Beveridge (in collaboration with Professor Unwin) presented, at very short notice, "Some Contributions to the History of Prices." Sir William Beveridge has drawn some important conclusions from his studies of the material upon which he and his collaborators are at work, and those who were present at Trinity will be looking forward eagerly to their publication. Finally, on the Sunday night, some purely impromptu discussions were arranged, which, in view of the methods adopted to secure subjects and speakers, proved more illuminating than might have been expected.

The business meeting of the Conference, over which Sir William Beveridge presided, was of some significance, for it had before it the draft constitution of an Association of Teachers of Economics, and this constitution, with some slight amendments, was given formal approval. The new Association, therefore, is now in existence, and will receive, it is hoped, the goodwill and encouragement of readers of the JOURNAL. Its constitution, as approved at Trinity, is as follows:

1. The AIM of the Association is to afford to the members opportunities of meeting one another, with a view particularly to the discussion of methods of teaching and of other topics of common interest in economics and kindred subjects.

2. Membership of the Association shall be open—

    (a) To teachers of Economics, Economic History, Sociology, Commerce and such kindred subjects as the Association may from time to time approve, in British and Irish Universities and University Colleges.

(*b*) Subject to the approval of the Committee in each case, to persons who have been engaged as such teachers, or who are or have been employed in the extra-mural teaching of Economics and kindred subjects, or on the staff of any institution teaching such subjects, and whose co-operation in the work of the Association is likely in the opinion of the Committee to be advantageous to the Association.

3. The Association shall at its annual meeting elect a Committee of seven of its members, one of whom shall be appointed by the Association as its Hon. Secretary and Treasurer.
4. The Committee shall appoint its own Chairman and shall determine its own procedure.
5. The Committee shall be responsible for the organisation of an Annual Conference, at which the annual meeting of the Association shall be held, and may call other meetings. The time and place of the annual Conference shall be determined at the previous annual meeting, which may, however, remit the final decision to the Committee.
6. There shall be an annual subscription of 5*s.*, or such other sum as the Association may from time to time determine, which shall entitle the subscriber to attend the Annual Conference without further payment (except for board and accommodation) and to receive copies of synopses of papers, etc., circulated in connection therewith.

The following were elected to the Committee of the Association, and all have consented to serve :—Sir William Beveridge, Professor Clay, Miss Grier, Mr. J. F. Rees, Mr. D. H. Robertson, Mrs. Stocks, and Mr. Hubert Phillips (Hon. Secretary and Treasurer). Mr. Phillips will communicate in due course with all those who are known to be eligible for membership of the Association. His address is 22, Grosvenor Mansions, 82 Victoria Street, S.W.1.

The Association will hold its first annual Conference at Birmingham, January 8th—11th, 1926.

H. P.

OBITUARY

George Unwin

The death of Professor Unwin at the early age of fifty-five removes the most original, and probably the most learned, of the economic historians whom England has produced. His experience—business in his youth, study at Cardiff, at Oxford (where he was a scholar of Lincoln), and at Berlin under Schmoller, several years' research among London records, a private Secretaryship to Lord Courtney at a time when political temperatures were raised by the South African war, and then teaching posts, in Edinburgh and Manchester—was unusually varied. The combination of scholarship and vivid contemporary interests was an ideal preparation for an economic historian.

Those who knew Unwin only through his books were probably most impressed by the scholarship. His first work, *Industrial Organisation in the Sixteenth and Seventeenth Centuries*, broke away from the insular tradition which till recently has been the misfortune of English economic history, and set the development of industrial organisation in England in the period between the Middle Ages and the eighteenth century against the background of continental movements. It is somewhat difficult, for it assumes a much wider knowledge than the ordinary student possesses, and compresses a mass of new material into 250 pages. His second book, *Gilds and Companies of London*, was a study of the same theme, but gives more space to discussion and generalisation and is probably better suited to the general reader. Both were the result of years of labour in the archives of the Guildhall, the British Museum, and the Record Office.

Unwin's range of knowledge was very great. His method was to combine a minute chronological study of any period in which he was interested, with broad surveys of the larger problems, to illustrate which he drew on his acquaintance with foreign economic history, and in certain centuries he seemed to know everything which had happened in every month of every year. But his learning was the least important part of his gifts as a historian and as a man. He was primarily a political philosopher. Intensely interested in general ideas, he had an almost uncanny gift for stripping popular conceptions of their decorous drapery of resounding principles, to reveal a satanical imp grinning horribly beneath the ermine and gold. His conviction was that the

creative force in human society was to be found in the spontaneous growth of voluntary associations, and that what gave history its meaning was not the activities of the State, but the broadening and multiplication of human relations, economic, social and cultural, which States had more often impeded than assisted. Holding that history is not past politics, but that politics are the squalid scaffolding of more serious matters, he waged against certain conventional interpretations of economic development the unceasing war of a humane realist.

Unwin's extraordinary success in stimulating others to historical work left him too little time for writing himself, and the only large volumes which he produced after taking up his chair at Manchester were *Finance and Trade under Edward III*, and *Samuel Oldknow and the Arkwrights.* In the former, in addition to giving the best account of the economic life of mediæval London yet written, he administered the *coup de grâce* to the view which saw in Edward III a precocious Cobden: in the latter he brought one stone to the revised interpretation of the Industrial Revolution which he hoped, with his colleague Professor Daniels and others, to undertake. He had accumulated a great mass of material on several different subjects, and in January he was full of plans for new books. It is some small consolation to his friends to have his own statement of his conception of economic history in the brilliant essay on "Some Economic Factors in General History," which appeared in a volume called *The New Past* less than a month before his death. But it is a fragment compared with the work which, if only he had been allowed greater leisure, he might have done.

R. H. T.

Samuel Oldknow and the Arkwrights. By GEORGE UNWIN, M.A., M.Com., with chapters by ARTHUR HULME and GEORGE TAYLOR. (Manchester University Press. 1924. Pp. xvi + 260. 12*s.* 6*d.*)

A REVIEWER'S delay makes this a notice of what we now know to have been George Unwin's last work: within a year of its publication he died, to the infinite loss of English Economic History. The book is a fitting memorial. It was produced in collaboration, and he was a great team-worker and inspirer of team-work. The scene is laid in his native country. Materials were supplied by a unique chance which he deserved, if ever scholar did—in a ruined mill, turned stable, were found in 1921 the mouldered papers of one of the leading cotton firms of the late

eighteenth century. Arkwright's lineal descendant furnished correspondence to fill the gaps in Oldknow's MSS., and the result is an ideal monograph on the transition from the old industrial system, which Unwin had studied so patiently, to the new system among whose products he was born, in whose chief seat he taught and directed research during the last fourteen years of his life.

Like Owen and Dale, Oldknow came from a draper's shop, to become one of the first and for a time the most famous manufacturer of British muslins—on the old outwork system. The papers reveal the whole economy of "giving out"—not only yarn, but reeds and gear for the fine fabrics were given out—and the growth of relations between the master muslin manufacturer and the new machine spinners. From 1784 the Arkwrights were financing Oldknow: they had for some time supplied him with twist. The existence of water-driven silk-throwing plant at Stockport (the chapter on the industrial revolution at Stockport is one of the best in the book) had early produced a Stockport cotton-factory system, and Oldknow is found driving warping-mills and other forms of machinery by power whilst his weaving was still, as indeed it always remained, handwork, and both his twist and his weft were being bought from spinners, large or small, running throstles or hand-jennies. Not till 1789 did he become a master spinner—at Stockport.

Before that he had begun to buy land at Mellor and Marple, where he was planning a great, and model, series of industrial establishments. The projects and works were gigantic, and in the end they ruined him, though Arkwright saved him from bankruptcy. Generosity marked both the planning and the industrial policy. Apprentices were not exploited. In local memory, and likely enough in fact, they had porridge and bacon for breakfast and meat for dinner daily. "If Carlyle had chanced on the records of Mellor"—so Unwin ended his book—"as well as on Jocelyn's Chronicle, he might have struck a juster balance between Past and Present."

Commercial organisation, social habits, popular religion, the mind of the eighteenth-century business man, are only some of the matters illustrated in the letters and trade records with which the book is crammed. How Oldknow raised the wind for his too ambitious enterprise at Mellor; how he issued his own paper money; with what forms and precautions he approached—he never concluded—a matrimonial alliance; what the relations were with his London wholesaling correspondents, the Saltes, who wrote him delightful, leisurely, sententious letters; how he trained

overseers and managers and how others tried to get them away from him; how fashion and war, boom and slump, played with him and his fortunes; how he farmed splendidly at a loss and ran lime-kilns which did not pay, and built bridges and invested money in canals; what he paid his weavers and what his running costs were at Mellor in 1797—all is here. He died in 1828, aged 72, still, one is glad to think, "in possession of the estate with all the prestige of a country magnate who was at the same time the founder of an industrial community," though things so lay between him and the Arkwrights that everything passed to them, as chief creditors, at his death. There is nothing small or mean about the man and no line from Gradgrinds in his sanguine open face.

J. H. CLAPHAM

EDMUND VILLEY

As Professor in the Faculty of Law at the University of Caen, Edmund Villey, who died last December at the age of 76, had taught Political Economy for nearly half a century. His allegiance to the classical school never wavered; and he ever defended individual liberty against State intervention and the encroachments of Socialism. But this did not prevent him from taking part in plans for social improvement, in particular the provision of cheap houses. Among the numerous books which he published may be distinguished, *Du rôle de l'État dans l'ordre économique* (1882), *Principes d'Économie Politique* (1893), *Charles Fourier*, *L'Œuvre Economique de Charles Dunoyer*. Many of his books were crowned by the Academy of Moral and Political Sciences, of which he was elected a member in 1916.

When the *Revue d'Économie Politique* was started in 1881, Villey accepted a seat on the Committee of Management as representative of the Classical Economy; earning the gratitude of those who feared that the then all-powerful Liberal School would boycott the new review. But while acting in this generous spirit Villey remained faithful to his principles. In the chronicle of Legislation which he drew up for the Review from its inception he never failed to criticise any laws which savoured of State Intervention. If these chronicles were collected into one or more volumes we should have a complete, if somewhat critical, history of the Labour legislation in France for the last thirty years.

CHARLES GIDE

Current Topics

The following have been elected to membership of the Royal Economic Society :

Abe, T.
Ailawadi, N. D.
Aiyar, A. V. R.
Alexander, D.
Alexander, Euphemia H.
Angell, James W.
Baker, L. J.
Baker, Mervyn B.
Ballard, Prof. L. V.
Batson, L. P.
Beck, G. H.
Belcher, Prof. Alice E.
Bellman, H.
Bethke, W.
Bhartiya, N. K.
Bidey, A. A.
Blair-Smith, H.
Boddington, W. H.
Boggon, J. H.
Bongard, R. R.
Bouldin, G.
Brison, C. S.
Brokenshire, F. H.
Brown, R. G.
Browne, A. G.
Browne, C. H.
Cadbury, Laurence J.
Calman, H. L.
Canaganayagam, N. M.
Case, Walter S.
Challiner, H.
Clause, W. L.
Cools, G. Victor.
Comish, Prof. N. H.
Copley-May, H.
Crerar, R.
Crick, F. S. O.
Crick, W. F.
Darling, B.
Davidson, A. C.
Davies, Gwilym J.
Doyle, W. F.
Drew, H. H.
Du Bois, Charles G.
Duke, W. W.
Easterby, E. M.
Edwards, N. H.
Elsbach, R. H.
Escher, W. C.
Evans, G. E.
Evans, William P.
Fenton, A. G.
Ferguson, T. J.
Firman, A. B.
Fleisher, A.
Fletcher, C. B.
Foster, T. N.
Garver, Prof. F. B.
Ghosh, M. K.
Ghosh, N. C.
Godby, H. W.
Gould, J. S.
Guillebaud, Rev. Harold E.
Guy, A. E.
Guy, E. S.
Haller, C. T.
Hamilton, D. J. W.
Hardwick, J. W.
Hardy, E. W.
Hargreaves, E. L.
Harr, Dr. L.
Harris, B. T.
Hawes, Stanley T.
Hayward, H.
Hetherington, A. C.
Hipwell, H. H.
Hodkin, Capt. T. W.
Honeyman, Rev. P. A. W.
Horridge, F. G.
Hottenstein, M. S.
Howells, D. E.
Hummel, J.
Ingram, H. H. D.
Iyer, E. S. A.
Jauncey, H.
Jeffrey, J.
Jeidels, Dr. O.
Johnson, Prof. E. H.
Johnston, R. H.
Johnstone, W. R. P.
Jones, Hugh
Jones, Prof. R. F.
Joynt, T. A.
Kadomtzeff, B. P.
Kahn, M. G.
Kanagat, B. N.
Kaul, B. N.
Kaul, Maheshwar N.
Kay, A.
Keir, J. S.
Kelsey, E. L. R.
Kenandine, E.
Kiernan, T. J.
Kilpatrick, T. McC.
Knight, A. T.
Levin, A.
Lewis, H. S.
Lovejoy, Frank W.
Lynch, D. D.
Makin, F. B.

Marshall, S.
Mathur, H. C.
Mehta, R. D.
Mikhail, S.
Miller, R. D.
Morford, H. F.
Naik, D. P.
Nash, A. W.
Osborne, Cyril.
Osborne, J. A. C.
Park, J. W.
Parkes, H. E.
Parsons, P.
Perrin, F. J.
Pinnock, H. L.
Raj, M.
Ram, Prof. V. S.
Richards, C. S.
Ross, L.
Roy, K. N.
Sakhuja, P. C.
Saraswat, M.
Sarma, N. S. R.
Scott, A. J.
Singh, B. N.
Singh, Prof. G. N.
Slessor, M.
Soames, G. H. D.
Soper, L. C.
Smith, J. L.
Smith, R. J. T.
Smithies, W. W.
Steadman, F.
Stell, E. G.
Stevenson, C. Maberly, M.D.
Stewart-Jones, W. A.
Stocker, Edgar P.
Strackbein, O. R.
Subbaiya, P. S.
Subbiah, A.
Talbott, A. L.
Tewari, R. K.
Thompson, Henry J.
Thorn, Leslie H.
Thorne, W. J.
Turnbull, C. L.
Verma, N. K.
Waterman, A. H.
Westerfield, Prof. R. B.
Weston, I. W.
Wheldon, H. J.
Wilkinson, A. N.
Wilson, C.
Wilson, H. A. R. J.
Zaitzeff, Prof. A. F.

The following have compounded for life membership:

Angell, James Waterhouse.
Baker, Mervyn Bruce.
Cadbury, Laurence John.
Davies, Gwilym John.
Du Bois, Charles G.
Evans, William Pugh.
Guillebaud, Rev. Harold Ernest.
Hodkin, Captain Thomas William.
Honeyman, Rev. Percy Allan Whorlton.
Jagtiani, H. M.
Joshi, Prof. R. M.
Kaul, Maheshwar Nath.
Lee, H. S.
Lovejoy, Frank W.
Mackintosh, Prof. W. A.
Osborne, Cyril.
Pilcher, R. G.
Stevenson, Claude Maberly, M.D.
Stocker, Edgar Percy.
Thompson, Henry James.
Thorn, Leslie Hasler.
Trant, J. B.
Ray, R.
Robinson, Mrs. M. E.
Rukmini-Amma, Miss C.
Zaitzeff, Prof. A. F.

The following have been elected to library membership: Library of Abo Academy, Finland; Commerzbibliothek, Hamburg; General Library, University of Georgia, U.S.A.; Girton College Library; Irving Bank-Columbia Trust Company, New York; North Carolina College for Women, U.S.A.; Providence Public Library, U.S.A.; Indiana University Library, U.S.A.;

Kansas State Agricultural College, U.S.A.; State University of Iowa Library; Murray Library, Lake Erie College, U.S.A.; Sydenham College of Commerce and Economics, Bombay.

We record with regret the deaths of the following Fellows of the Society:

Benson, W. A. S. (elected 1890).
Birch, G. („ 1920).
Henderson, J. („ 1891).
Powell, Dr. Ellis („ 1906).
Tritton, J. H. („ 1890).
Watson, W. („ 1922).

The Master of Jesus College, Cambridge, has discovered in the archives of the college a Latin declamation by Malthus in his own handwriting, 1787, on the usefulness of the Classics in general education, and a Latin declamation by Coleridge, 1792, in his handwriting "that the desire of fame is unworthy of a wise man." Both were undergraduates of Jesus at the time of writing. In the Master's opinion, the composition of Malthus is distinctly better than that of Coleridge, in point of good sense and Latin, as well as in caligraphy.

Our Australian Correspondent writes:—

"A present topic of discussion is the recent address of Mr. J. M. Keynes on the existing British policy in regard to the investment of capital abroad. The question of "managed foreign investments" by Great Britain is one which affects the Commonwealth directly, and it is felt by some that the writer named has yet to appreciate the feeling of many Australians on the topic. It has been long the traditional policy of Great Britain that her investors should be left completely free to place their capital wherever they consider they can get the best return. But side by side with this is the growing necessity, as it is conceived by many Australians, of building up the British Empire. It is rather embarrassing then to learn that it may be held to-day to be advisable to modify the policy of the Colonial Stock Act of 1900, and that Great Britain might much better be content with a volume of exports sufficient to pay for her imports, and apply surplus capital and labour at home, if national equipment is to grow as fast as population and the theoretical standards of

life. It is thought here that the English labour market must continue to show a surplus population, needing to be transferred over-seas where required for the development of Empire territory, and if population, then of necessity a portion of British capital must be transferred also. It seems to some a short-sighted view which would limit the British race and British capital to the 'homeland.' It seems rather too late in the day for reviving such a policy of restriction. The family of young and rising communities constituting the Colonies generally would possibly find it harder to link up their future destiny fully with that of Great Britain (as they did in the war) with the heavy public debts and taxation thereby incurred—should the mother country endeavour to stand alone, and, as did the Labour Government in Great Britain, fail to appreciate the view of many Australians in regard to the Singapore base, and the Geneva protocol which may affect the present policy of a white Australia. It would be undesirable in any way to impel Australians to aim at a closer alliance with the United States."

OUR Japanese Correspondent writes :—

"The loss of Professor Marshall is deeply regretted in Japan, where his works are very widely [1] read and where he was highly respected. The writer of these lines being himself one of Prof. Marshall's devoted pupils, and having been favoured with his kindness from his return to Cambridge as Professor of Political Economy (January 1885) until his death, has written his biography for publication in the *Political Science Journal* for January, 1925. The article is divided into eight chapters under the headings of :—

1. His birth and youthhood. 2. Schooling and family life. 3. Active life and publications. 4. Theories and the environment. 5. Works and deeds. 6. Character and hobbies. 7. Home and living. 8. End and wills.

Marshall's great services to science and to his country are carefully narrated, and the great help given him by Mrs. Marshall is also mentioned in detail. In writing this biography, the author was greatly benefited by the extensive and illuminating article contributed by Mr. Keynes to the ECONOMIC JOURNAL of September 1924, his indebtedness to which he desires here to acknowledge. It is the intention of the Economic Research Association, which includes leading economists in Japan, to

[1] His "Economics of Industry" (published in 1879 and 1892) and "Industry and Trade" were translated into Japanese and widely circulated.

hold before long a special meeting in memory of Professor Marshall."

"In addition to many works already published by Prof. K. Horiye of the Keio University, a new book has just come out. The title is "The Critical Condition of Japanese Economy" (price 3 yen, 558 pages). In it, he discusses in detail the external and domestic pressure on Japanese economy arising out of the reorganization after the great earthquake, and international economic conditions. Among other important economic works during the three preceding months, I must mention "Lectures on Economics" (3 yen, 334 pages) by Mr. S. Kawadzt (Professor in the Tokyo Imperial University), in which the author dwells chiefly on economic life and organization, as well as on value and prices. "Researches on the Economic History of Japan" (10 yen, 794 pages), by Mr. G. Uchida, late Professor of the Kiòto University, is worthy of notice, being a work full of originality. Chapters on the economic history of Japan, on land and tax systems in different ages and on the history of economic study are the result of considerable research. "Compendium of Economic Works" (7.80 yen, 1043 pages), by Mr. Onodera, may also be mentioned. The works of Adam Smith, Malthus, Mill, Jevons, De Laveleye, Menger, Schmoller and Gide are carefully reviewed."

Our Danish Correspondent writes :—

"The Danish King, Christian IV, who died in 1648, was very enterprising. The *Royal Mail*, founded by him in 1624, has just celebrated its tercentenary. In the same year, through his action, Copenhagen—then a place with only 25,000 inhabitants against 700,000 now—obtained an Exchange, which has had much influence on Danish commercial life. The building was handed over in 1856 to the Danish Merchant Guild (Grosserer Societetet). On the occasion of the tercentenary of the Exchange, Mr. J. Schovelin, Commissioner of the Exchange, has published two volumes giving the history of the Merchant Guild, 1842–57, "Grosserer Societetets Komite," of which the second volume gives a detailed account of the crisis of 1857. Mr. Schovelin had previously published in 1917 a volume on the history of the Merchant Guild, 1797–1842."

Our South African Correspondent writes :—

"A movement has been started to institute an Economic Society of South Africa. Mr. H. S. Freemantle, formerly

Professor of History at Cape Town, and sometime member of the Union Parliament, has been the moving spirit in this; he hopes that the society will not be restricted to purely intellectual activity, but will be effective in bringing the influence of economic science to bear on the leaders of political and commercial life in the Union.

"Dr. M. H. de Kock, lecturer on Economic History at Cape Town University, has been appointed to a seat on the Board of Trade and Industries."

PROFESSOR R. C. MILLS, of Sydney University, has successfully inaugurated a course of lectures on economic questions, including currency and foreign exchange, which was primarily arranged by the Commonwealth Bank through the University Extension Board. At the first lecture held in the Bank's luncheon room in Sydney nearly 600 bank officers were present.

Professor E. M. Moors, M.A., formerly lecturer in actuarial mathematics and statistics at Sydney University, and latterly member of the State Superannuation Board, died in Sydney on the 7th October, aged 65.

PROFESSOR EDGEWORTH has been elected a Foreign Member of the Royal Swedish Academy of Science.

Professor Andréadès has been elected a Corresponding Member of the Academie des Sciences Morales et Politiques.

THE Thirty-seventh Annual Meeting of the American Economic Association was held at Chicago at the end of December. The principal subjects discussed were :—

Readjustments of Law and Industry.
The Economics of Advertising.
Population and Natural Resources.
Problems of Economic Theory.
The World's Monetary Problems.
Psychological Problems of Industry.

At the Session devoted to "The World's Monetary Problems" papers were read by Dr. T. E. Gregory and Mr. J. B. Bellerby.

UNDER the Peter Le Neve Foster Trust the Council of the Royal Society of Arts offer a Prize of £25 for an essay on "The Effect of Trade Union Regulations on Industrial Output."

Intending competitors must send in their essays not later than March 31st, 1925, to the Secretary, Royal Society of Arts, John Street, Adelphi, London, W.C. 2, from whom further particulars can be obtained.

THE Council of the University College of North Wales, Bangor, invite applications for the post of *Independent Lecturer in Economics*, at a salary of £550. Fifty copies of applications and testimonials are required and must be received not later than March 30th, by the Registrar, University College of North Wales, Bangor, from whom further particulars may be obtained.

RECENT PERIODICALS AND NEW BOOKS

Economica.

NOVEMBER, 1924. *Alfred Marshall.* PROF. E. CANNAN. *The Growth of International Society.* PROF. P. J. NOEL BAKER. International justice transcends the interests of individual States. *Competitive and Social Value.* PROF. L. T. HOBHOUSE. "The kind of life which results from every man seeking his own as best he can is not that which would be chosen by men envisaging Society as a whole and co-operating intelligently in the pursuit of its well-being." *Short and Long Rates of Interest.* F. LAVINGTON. Why the average levels of short and long rates differ, and how far their movements correspond in magnitude and direction, is shown by an ingenious method. *Currency Reform in Poland.* DR. ADAM KRZYZANOWSKI. A strong Government and a balanced Budget have favoured the recovery from the orgy of inflation during which a gold dollar exchanged for over six million paper marks.

Edinburgh Review.

JANUARY, 1925. *Rural Problems in the United States.* SIR HENRY REW. Low prices—low in purchasing power—and high taxes—in some regions from 12 to 25 per cent. of net rent—are main causes of agricultural depression. Forests will be exhausted to supply paper, unless some process such as "de-inking" and "repulping" old newspapers becomes available. *Highland Rural Industries.* F. F. GRAND.

Labour Gazette.

NOVEMBER, 1924. There is an interesting comparison of the levels of real wages in London and other capital cities (July 1, 1924). Index-numbers, whether based on the quantities of each kind of food in each country or on a sort of average international standard of working-class consumption, show for European capitals figures ranging from above 90 to below 40 compared with London as 100; but for Ottawa about 170, for Philadelphia over 200.

International Labour Review (Geneva).

NOVEMBER, 1924. *The Forty-eight-hour Week and Industrial Efficiency.* P. SARGANT FLORENCE. If one standard length of working week must be chosen, the forty-eight-hour week probably best satisfies the criterion of maximum output with minimum accidents, lost time, and overhead charges.

Quarterly Journal of Economics (Cambridge, Mass.).

NOVEMBER, 1924. *Alfred Marshall.* Prof. F. W. TAUSSIG. A critical appreciation. *The Distribution of Corporate Ownership in the United States.* H. T. WARSHOW. There has been an increase

from about 4,000,000 stockholders in 1900 to about 14,000,000 in 1923; with a shifting of ownership from the wealthy few to the middle and wage-earning classes. *Competitive Costs and the Rent of Business Ability.* A. B. WOLFE. It is concluded that the "rent of superior entrepreneurial ability" is "inconsistent with the assumption of free price competition." *The Australian Income-Tax.* D. B. COPLAND. The main conclusions of the Royal Commission (1920) are summarised. The complicated Australian graduation, though not approved by the Commission, still subsists.

Labour Costs in the United States. F. C. TAUSSIG. There is compared the physical product which a given amount of labour measured by units of time will yield in the United States with the corresponding product in England, Germany, or Japan. The causes of the differences are not taken into account. Thus the statement that the output of pig iron per worker is more than twice as great in the United States compared with England makes abstraction of the fact that the horsepower per worker in America was twice as great as in Great Britain. The output of coal per worker (irrespective of other factors) is some three times as great in the United States as in Great Britain. The output of yarn per worker is four times larger in the United States than in Japan.

The American Economic Review (Cambridge, Mass.).

DECEMBER, 1924. *The Par Remittance Controversy.* CHARLES S. TIPPETTS. *Economics and Portland Cement Prices.* FRANK A. FETTER. Referring to a work on the subject, by H. P. Willis and J. R. B. Byers, who under the guise of uniform price appear to uphold economic fallacies and monopolistic exploitation. *Fair Value for Effective Rate Control.* JOHN BAUER. A reply to Judge Ransom's article in the June number. *Relation of Farm Land Income to Farm Land Value.* C. R. CHAMBERS. Interesting comparisons between the value of land at any time and rent present or future. *New Measures in the Equation of Exchange.* CARL SNYDER. New observations appear to throw new light on the relation of the rate of turn-over of bank deposits to the volume of trade.

Journal of Political Economy (Chicago).

OCTOBER, 1924. *The Economic Future of our Agriculture.* C. L. HOLMES. *The Federal Reserve Bank Note.* E. E. CUMMINS. *Rate Regulation and Fair Return.* C. O. RUGGLES. Referring to regulations limiting the earnings of public utilities. *European Currencies and the Gold Standard.* MARCUS NADLER. The restoration of the currencies of most continental countries in the continent of Europe would mean the introduction of the gold-exchange standard.

DECEMBER, 1924. *Regulation of Building and Loan Associations.* H. F. CLARK. *Inequality and Accumulation.* A. F. MCGOUN. Inequality as favouring the accumulation of capital is only an evil when it leaves the poor short of necessaries or renders the power of the rich dangerous. *Objections to Family Wage System.* PAUL H. DOUGLAS. Thirteen objections are stated and answered;

e.g., to the objection that the opposition of the unmarried workmen would be fatal to the scheme it is replied that "an adequate campaign of education" would show that the married workman did not receive more for himself than the single." "The paying of the allowance to the mother would also lessen the jealousy of the single man." *Price Responsiveness of Wheat Growers.* L. S. LYON and T. EDWARD RASSIEUR. Spring wheat acreage shows that growers in determining acreage are materially influenced by the price of wheat through the thirteen months preceding.

Political Science Quarterly (New York).

DECEMBER, 1924. *The Problem of Agriculture.* R. G. TUGWELL. *Co-operative Marketing Finance.* J. M. CHAPMAN. *The Attempt to Establish the Eight-hour Day by International Action*, II. H. FEIS. *Mercantilism in Richelieu's Policy.* F. C. PALIN.

Annals of the American Academy (Philadelphia).

NOVEMBER, 1924. The Automobile is the subject of this number. Its "province and problems" are considered in some fifty short articles by different experts. Among social results it appears that the new facilities of locomotion favour the work of the Church, but render the home less than ever a place to live in.

JANUARY, 1925. The subject of this number is the Agricultural Situation in the United States; treated by a number of writers.

Journal des Économistes (Paris).

OCTOBER, 1924. *L'augmentation du pouvoir d'achat par la baisse des prix.* YVES GUYOT. The moral is illustrated by the career of Henry Ford. *Le "British Annual Finance Act."* 1924. W. M. J. WILLIAMS.

NOVEMBER. *Les inquiétudes de l'Homme moyen.* YVES GUYOT. The "deviations" of M. Herriot and those of Mr. Ramsay Macdonald are disquieting. *L'exemple du traité commercial anglo-russe.* A. MILLER.

DECEMBER. *Les habitations en bon marché.* G. DE NOUVION. *Les Plus-values des fonds de commerce et le Fisc.*

JANUARY, 1925. *La Situation financière de la France.* YVES GUYOT. *Les accords commerciaux.* P. CASSOUTE. *Venise et son avenir.* P. Y. SCHILLOT. *La culture du blé et la prehistoire.* J. B. L. *Les physiocrates et la Chine.* J. LEFORT.

Revue d'Économie Politique (Paris).

SEPTEMBER–OCTOBER, 1924. *Le budget de 1925 et le crédit de la France.* CHARLES RIST. *La reforme monétaire en Pologne depuis le mois de mars,* 1924. G. NOWAK. *Les nouvelles tendances de l'École antichienne.* G. H. BOUSQUET. Menger's *Grundsätze* and Wieser's *Theorie der Gesellschaftlichen Wirtschaft* are praised; but the writer's highest encomiums are reserved for Schumpeter's *Œkonomische Entwicklung*, which is described as the most original and profound economic theory (with possibly an exception in favour of Pareto) that has appeared since Walras' famous memoir on economic equilibrium.

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

Vol. 52, No. 3. The subjects of the principal articles are: The significance of the capitalistic system; The classification of existing forms of undertaking; The group-idea, so to interpret *Die Masse*, the essence of which consists in a spiritual (*geistig-seelischen*) bond that makes unity out of plurality. Among "Mass-psychological elements" are "Wirerlebniss" and other untranslateable phrases. Another article deals with the corporative and the hierarchical thought in Fascismus.

Band 53, No. 1. The article last named is continued in this number. In an article on Progress the more cheerful prospects are chequered by four serious dangers—the dwindling proportion of the cultured races, the banality of capitalist manners, strife between classes, and war among nations. Follow seventy pages directed against the "Universalismus" which Othmar Spann opposed to the views of Max Weber and indeed of most modern philosophers vitiated according to Spann by "Individualismus." Time in Economics is discussed by ERICH VOEGELIN with reference to the views of *Marshall, Böhm-Bawerk, J. B. Clark*, and many other authorities.

Jahrbücher für Nationalökonomie und Statistik (Jena).

SEPTEMBER–OCTOBER, 1924. The principal articles are: On the foundation of economic science, a criticism of the conception "Konjunctur"; The shifting of taxes. "Poplarismus" is the title of reflections on Socialism and Poor Relief with reference to recent incidents in a London district.

DECEMBER. The logical division of the general term Political Economy is elaborated by OTHMAR SPANN. The consequences of changes in the value of money (Währung) to the several classes of the German people are lucidly analysed by PROF. EULENBERG.

Zeitschrift für Volkswirtschaft und Sozialpolitik (Vienna).

Vol. IV., Nos. 7–9. The subjects of the four articles are: The problem of democracy in Greek political philosophy (*Staatslehre*); Schumpeter's theory of Distribution—the determination of the share of the product accruing to each factor of production; Agricultural policy in Russia, 1914–1923; The Platonic conception of the State.

Zeitschrift für die Gesamte Staatswissenschaft (Tübingen).

1924, No. 2. Among the subjects dealt with are: The Newspaper Industry, Stabilising the Mark, The Russian Agrarian Revolution, Agricultural production on a large and on a small scale during the War.

1924, Nos. 3 and 4. The comparison between production on a large and on a small scale in agriculture during the War is concluded by DR. UHLE; who contends that the large concerns were not the most productive. Among other articles may be mentioned that of DR. R. KERSCHLAGE on the currency systems of the States which have succeeded the Austro-Hungarian Empire.

Weltwirtschaftliches Archiv (Jena).

JANUARY, 1925, No. 1. The conception of the class struggle, The critical time (*Schicksalstunde*) for German industry, Agrarian policy and protection, are among the subjects treated.

De Economist (La Hague).

DECEMBER, 1924. *Kapitaalvorming*. . . . DR. C. A. VERRIJN STUART. Against the "abominable doctrine of class-war" economic reasoning fortified by the theory of *margins* shows that the formation of capital is advantageous to the working-class.

Giornale degli Economisti (Rome).

NOVEMBER. *Il piano regulatore di Messina e i Suoi effetti economici.* M. BOLDRINI. A criticism of the plan for the reconstruction of Messina; which, among other difficulties, has encountered an unexpected increase in the population.

DECEMBER, 1924. *Tecnica é disoccupazione.* A. G. CANINA. Technical improvement may in critical times prove detrimental to the working classes. *L'opera di Alfredo Marshall.* G. DEL VECCHIO. The co-ordination of Ricardian and Jevonian doctrines is said to have been effected by Marshall and Pantaleoni.

La Riforma Sociale (Turin).

NOVEMBER–DECEMBER. *Maffeo Pantaleoni.* UMBERTO RICCI. *Popolazione e risparmio in Italia.* V. PORRI. The growth of population is compared with the growth of capital.

Annali di Economia (Milan).

1924, Vol. I. The first volume of this new periodical consists of these four articles: *La peripezie monetaire del dopoguerra.* ACHILLE LORIA. *La terra e l'imposta.* LUIGI EINAUDI. *Problemis di economia visti di uno statistico.* CORRADO GINI. *La produzione del suolo italiano.* FULVIO ZUGARO.

NEW BOOKS

English.

ACWORTH (SIR WILLIAM M.). The Elements of Railway Economics. New edition revised and enlarged by the author and W. T. STEPHENSON. Oxford: Clarendon Press. 1924. Pp. 216.

BHATNAGAR (BRIGOPAL). Currency and Exchange in India. Allahabad: Ram Narain Lal. 1924. Pp. 139.

[The author is lecturer in Economics at the University of Allahabad.]

Birkbeck College Centenary Lectures. With a preface by the RIGHT HON. J. RAMSAY MACDONALD. London University Press. 1924. Pp. 178.

[Of the seven lectures here collected the one on Evolutionary Economics by Sir William Ashley most concerns the readers of this JOURNAL. Tracing the development—which he does not identify with improvement—of the study, Sir William points to several "directions in which new phenomena may be expected to give birth to new theoretical ways of looking at things," *e.g.* the prevalence of combination.]

BOECKELL (R.). Labour Money. With an Introduction by the RIGHT HON. VISCOUNT MILNER. London: Hopkinson. Pp. ix + 181. 7*s*. 6*d*.

BURNS (C. DELISLE). A Short History of Birkbeck College. London: University Press. 1924. Pp. 170.

[On the occasion of the College's Centenary the Lecturer on Philosophy describes the steps by which the College rose from the position of a Mechanics' Institute to its present status as a school of the University of London. In the latter stages of this transformation Dr. Armitage Smith, whose loss was lately deplored in this JOURNAL, played an important and gratefully remembered part.]

Co-operative Congress. Report of the 56th annual Congress. 1924. Edited by A. WHITEHEAD. Manchester: Co-operative Union. 1924. Pp. 654.

COX (HAROLD). The Failure of State Railways. London: Longmans. Pp. 40. 6*d*.

GHOSE (S. C.). A Paper on Railway Economics. Calcutta: Book Co. Pp. 108. 2*s*. 6*d*.

[A useful booklet by a well-known writer and ex-railway officer. Worth special notice is his demonstration of the need to distrust conclusions drawn from broad general averages. He shows that one railway may have much higher average receipts per ton mile than another, though the individual rates of the two are the same, if a very large proportion of the traffic of the first line is low-class, while the second line deals mainly with high-class (and therefore high-rated) traffic.]

GHOSH (J.). A Study of English Theories of Rent. Calcutta: Majumdar. 1924. Pp. 281.

GHOSH (J.). History of Land Tenure in England. Second edition. Calcutta: Majumdar. 1924. Pp. 380.

HORROCKS (J. W.). A Short History of Mercantilism. London: Methuen. 1925. Pp. 249.

JOAD (C. E. N.). Introduction to Modern Political Theory. Oxford: Clarendon Press. 1924. Pp. 127.

JONES (ROBERT). Everyone's Economics. London: Sidgwick and Jackson. 1924. Pp. 304. 5*s*.

KATZENELLENBAUM (S. S.). Russian Currency and Banking. London: King. 1925. Pp. 198.

[The author, who is Professor of Economics at Moscow University, in presenting this English version of writings published in Russian, seeks both to bring the facts before the British public and also to promulgate his theories respecting the depreciation of a paper currency.]

KEEN (F. N.). The law relating to Public Service Undertakings. London: King. 1925. Pp. 320.

[The undertakings are such as railways, canals, tramways, supply of water, gas, and electricity, harbours, docks, etc. The undertakers are public authorities, companies, and private individuals. The survey of the legal position is based on lectures delivered at the London School of Economics.]

KOCK (M. H. DE). Selected Subjects in the Economic History of South Africa. Cape Town: Juta. 1924. Pp. 475.

LOWENFELD (HENRY). Justice in Dealings on Aristotle's Plan. London: J. Murray. 3*s*. 6*d*.

MACKINTOSH (W. A.). Agricultural Co-operation in Western Canada. Toronto: Ryerson. 1924. Pp. 173.

RAPPOPORT (DR. A. S.). Dictionary of Socialism. London: Fisher Unwin. 15*s*.

REISS (RICHARD). The New Housing Handbook. London: King. 1924. Pp. 199.

STAMP (SIR JOSIAH). Studies in Current Problems in Finance and Government. London: King. 1924. Pp. 342.

WADIA (P. A.) and JOSHI (G. N.). The Wealth of India. London: Macmillan. 1925. Pp. 438.

[The authors, one a Professor, the other a Lecturer in Wilson College, Bombay, aim at "formulating an economic policy for India." They survey accurately the economic conditions of the country, ready to improve them by ideas adopted from the West—*e.g.* some degree of birth-control—but cherishing the mentality of the East, "a heritage from the part woven into the very fabric of our being, and embodied in our poetry, philosophy, art, and religion."]

WAKINSHAW (W. H.). The Solution of Unemployment or the Social Credit Theorem of Major C. H. Douglas. Newcastle-on-Tyne. 1924. Pp. 289.

WILLARD (MYRA). History of the White Australia Policy. Melbourne: University Press. 1923. Pp. 217.

WILLIAMS (D. J.). Capitalist Combination in the Coal Industry. London: Labour Publishing Co. 1924. Pp. 176.

American.

BYE (RAYMOND T.). Principles of Economics. New York: Knopf. 1924. Pp. 508.

FILENE (EDWARD A.). The Way Out. New York: Doubleday. 1924. Pp. 306.

[A secondary title describes the work as a forecast of coming changes in American business and industry.]

HALL (LINCOLN W.). A Study of Cyclical fluctuations in the National Bank System during the Years 1903 to 1921. Philadelphia: University of Pennsylvania. 1923.

[A doctorate thesis.]

HARRISON (SHELBY M.). Public Employment Offices. Their purpose, structure, and methods. New York: Russell Sage Foundation. 1924. Pp. 685.

[On the work of public Labour Exchanges in the United States.]

HORROCKS (J. W.). A Short History of Mercantilism. London: Methuen. 1925. Pp. 247.

[A compendium beginning with ancient times and extending to distant countries such as Russia and Japan.]

JEROME (HARRY). Statistical Method. New York: Harper. 1924. Pp. 395. $3.50.

JONES (ELIOT). Principles of Railway Transportation. New York: Macmillan Co. 1924. Pp. 607.

MCGRANE (REGINALD C.). The Panic of 1837. Chicago: University Press. 1924. Pp. 253.

["The close relationship between business and politics, the clashing ambitions of Andrew Jackson, Nicholas Biddle, and Martin Van Buren," together with "financial problems of the Jacksonian era" are set forth.]

MILLS (FREDERICK CECIL). Statistical Methods applied to Economics and Business. New York: Holt. 1924. Pp. 604.

["No attempt has been made to secure the brevity of exposition desirable in a strictly mathematical work." Mr. Mills, a Professor of Business Statistics in Columbia University, writes "for the learner, not for the finished master." The arrangement and typography are unusually clear.]

RYAN (FRANKLIN W.). Usury and Usury Laws. Boston: Houghton. 1924. Pp. 247.

[The book is one of those to which a prize has been awarded by the distinguished Committee who fix the subjects and select the candidates for the prizes generously offered by Messrs. Hart Schafner and Martt of Chicago. The author is Instructor in the Harvard Business School.]

SELIGMAN (E. R. A.). Income Taxes and the Price Level. New York. Academy of Political Science. 1924. Pp. 23.

[An address showing that a general tax on all income is not directly shifted, but may indirectly affect prices by checking accumulation and enterprise.]

STURGIS (HENRY S.). Investment a New Profession. New York: Macmillan Co. 1924. Pp. 210.

VALGREN (VICTOR N.). Farmers' Mutual Life Insurance in the United States. Chicago: University Press. 1924. Pp. 186.

[The author is an official on the Bureau of Agricultural Economics and has acted as investigator of agricultural insurance.]

VEBLEN (THORSTEIN). The Theory of the Leisure Class. An economic study of institutions. London: Allen and Unwin. 1924. Pp. 404. 10*s*. 6*d*. net.

VEBLEN (THORSTEIN). Absentee Ownership and Business Enterprise in Recent Times. The case of America. London: Allen and Unwin. 1924. Pp. 445. 10*s*. 6*d*. net.

VEBLEN (THORSTEIN). The Vested Interests and the Common Man. London: Allen and Unwin. 1924. Pp. 183. 5*s*. net.

French.

AFTALION (ALBERT). L'industrie textile en France pendant la guerre. Paris: Presses Universitaires. 1924. Pp. 260. 20*f*.

[This volume and that of Prof. Hauser mentioned below are the two first of the monographs on the economic history of the war published by the Carnegie endowment which have appeared in French. The series of monographs is to appear in eight languages.]

CASAMAJOR (JEAN). Le Marché à Terme des Changes en France. Paris: Dalloy. 1924. Pp. 270.

DUBREUIL. La Republique industrielle avec preface de CHARLES GIDE. Paris: Bibliothéque d'Education. 1924. Pp. 216. 7*f*.

[The main object of the book is to prove that the particular form of cooperation among operatives known in France as "commandite d'ateliers" and in Italy as "Societa di lavoro" or "di bracchianti," conduces to production and industrial peace.]

GIRAUD (EMILE). La crise de la démocratie et les réformes nécessaires du pouvoir legislatif. Paris: Giard. 1925. Pp. 239.

HAUSER (HENRI). Le problème du regionalisme. Paris: Presses Universitaires. 1921. Pp. 176. 20*f*.

[See Aftalion above.]

HECHT (JOHN S.). La vraie Richesse des Nations. Esquisse d'une nouvelle civilisation et de ses bases Économiques. Paris: Giard. 1925. Pp. 416.

JAFFÉ (WILLIAM). Les théories Économiques et Sociales de Thorstein Veblen. Paris: Giard. 1924. Pp. 185.

MASSE (RENÉ). La production des Richesses. Paris: Giard. 1925. Pp. 979.

PAILLARD (GEORGES). Les grands Marchés Financiers. Lausanne: Payot. 1924. Pp. 40.

[The author is a Professor at the University of Lausanne.]

PINOT (ROBERT). Les Œuvres Sociales des industries metallurgiques. Paris: Colin. Pp. 271. 20*f*.

[As President of the Syndicat of Metallurgical Industries known as *Comité de Forges*—which is not restricted to economic interests—the author is qualified to describe philanthropic institutions such as insurance against accidents, provision of pensions, "endowment of families."]

ROUSIERS (PAUL DE). Les grandes industries modernes, II. La Metallurgie. Paris: Colin. 1925. Pp. 283.

German.

BRENTANO (LUJO). Konkrete Grundbedingungen der Volkswirtschaft (Gesammelte aufsätze von L. BRENTANO). Leipsic: Meiner. 1925. Pp. 432 + 73.

LAUM (BERNHARD). Heiliges Geld. Tübingen: Mohr. 1924. Pp. 164.

[A subtitle describes the work as an historical inquiry into the "sacral" origins of money; offerings in kind becoming commuted for symbols taking the form of money.]

HAHN (ALBERT). Geld und Kredit. Tübingen: Mohr. 1924. Pp. 146.

MEERWARTH (DR. R.). Nationalökonomie und Statistik. Berlin: Gruyter. 1925. Pp. 506.

PEKAŘ (DR. JOSEF). Irrtümer und Gefahren der Bodenreform. Prague: Lerche. Pp. 103.

[The booklet is translated into German. The author is a Professor in the Karl University of Prague.]

Italian.

MARCONCINI (F.). Saggio sulla rendita e sulle sue modificazioni imputabili all'azione dei mezzi di trasporto. Milan: "Vita e Pensiero."

MAZZEI (JACOPI). Politica Economica Internazionale Inglese, prima di Adamo Smith. Con prefazione del Prof. Marco Fanno. Milan: "Vita e Pensiero." 1924. Pp. 460.

[The origins of English economic greatness are traced down to the publication of the Wealth of Nations.]

NICEFORO (ALFREDO). La Méthode Statistiques et ses applications aux Sciences Naturelles aux Sciences Sociales et a l'Art. Traduit de l'Italien par R. Jacquemin. (Bibliothéque internationale d'Économie politique). Paris: Giard. 1925.

[This work belongs to the small class of popular yet accurate expositions of statistical method. It is differentiated by the quaintness of the illustrations, especially those relating to Art. Among the epigrams of Martial the length which is most frequent is the shortest; the frequency diminishing as the length increases. The distribution of lengths in the case of Phædrus' fables and Horace's odes is not so "abnormal." The heights of the Greco-Roman statues in the Louvre are distributed almost normally. The lengths of words in different languages—the prose of Cæsar or of Dante—present interesting contrasts. And so on.]

SARINO (A.). Le finanze del Piemonte nella secunda meta del XVI secolo. Turin.

Spanish.

PARET (L. VICTOR). Plan de Una Politica Moderadora de las Crisis Económicas. Informe presentado a la Asociación Internacional de lucha contra el paro. Toledo: Colegio de María Cristina. 1924. Pp. 23.

SUPERCASEAUX (G.). Historia de las doctrinas ecónomicas en América y en especial en Chile. Santiago (de Chile): Soc. Imp. y Lit. 1924. Pp. 143.

[The author of this booklet is already favourably known from his work on the monetary system and banking organisation of Chile reviewed in the ECONOMIC JOURNAL 1922. The subject is briefly rehandled here; and other peculiarities in the economic history of Chile are described, such as the gradual change from Free Trade to Protection, and the movement called Pan-Americanism.]

THE ECONOMIC JOURNAL

JUNE, 1925

PROFESSOR EDGEWORTH'S COLLECTED PAPERS [1]

THESE three volumes, which appear under the auspices of the Royal Economic Society, comprise the principal articles and reviews on economic subjects contributed by Professor Edgeworth (for the most part to the ECONOMIC JOURNAL) between 1887 and 1921. The first volume is divided into three sections, headed respectively Value-and-Distribution, Monopoly and Money; and the second into three further sections, International Trade, Taxation and Mathematical Economics. Some short additional notes have been introduced by the author, and some passages, which appeared in the original articles, have been omitted. The third volume is a collection of critical and appreciative reviews.

The Editor of the ECONOMIC JOURNAL has invited me to write a comment on this important publication. It is a privilege to be given this opportunity of expressing the pleasure that all English economists will feel in seeing Professor Edgeworth's economic papers brought together in one collection and of voicing our common tribute of gratitude and admiration for his long record of valuable and exacting work. It will not be expected that I should attempt here any detailed appraisement and criticism of discussions covering so wide a range, and probing so deeply into subtle and elusive issues. Had I conceived that to be the duty of whoever should review this book I should have declined the task; for I am not competent to undertake it. There is, however, a humbler service needed: to note and characterise in a general way, for those not already familiar with it, the scope and nature of Professor Edgeworth's work. That service I may, perhaps, adventure without presumption.

In the first section, Value-and-Distribution, the most important paper is that entitled *The Theory of Distribution*, reproduced from

[1] *Papers relating to Political Economy*, by Professor F. Y. Edgeworth, 3 vols. (Published on behalf of the Royal Economic Society by Macmillan and Co.)

the *Quarterly Journal of Economics* of February 1904. In the course of it attention is focussed upon the peculiar status of the entrepreneur, and the question is raised whether entrepreneurs, like other agents of production, tend to receive payment equal to the value of the marginal net product of their services. The difficulty, of course, is that there is no conscious agent paying entrepreneurs for their work in the way that entrepreneurs pay other agents of production, and that, therefore, in their case, the mechanism, which, for those others, adjusts their payment to their "worth," is lacking. "The law of marginal productivity," Professor Edgeworth concludes, "is not fulfilled in the sense that the portion of the national dividend accruing to entrepreneurs is a sum of terms each of which is the product of an entrepreneur's work reckoned in hours, or similar doses, and the marginal productivity of the dose (multiplied by a certain coefficient). Let us see whether the law is fulfilled when we take a larger dose, the total work of an entrepreneur. . . . The affinity between entrepreneurs and salaried managers supplies the missing link for the general proof of the new law. For, normally, it may be presumed that an independent entrepreneur (of our second species) does not make less (in addition to the profit that he makes, or might have made, by investing in some other business money of his own) than a manager of like abilities. And perhaps he does not make much more. The difference is possibly small, probably diminishing, certainly difficult to verify statistically, perhaps hardly worth fighting about. Interpreted cautiously, the law holds good approximately" (Vol. I. pp. 29–30). This is a characteristic passage.

In Section 2, on *The Theory of Monopoly*, there is included an article from the ECONOMIC JOURNAL, in which "the implements of mathematics" are employed to criticise a number of propositions maintained by Professor Seligman in the earlier editions of his *Shifting and Incidence of Taxation*. There is also included a paper on Railway Rates, in which some issues connected with discriminating charges are discussed. But the most important article in this section is a re-translation from the *Giornale degli Economisti* of 1897 of the original and important article which appeared there under the title *Teoria pura del Monopolio*. Monopoly is a subject which it is peculiarly difficult to examine satisfactorily without the help of mathematics, and in which, moreover, even mathematicians, unless they use their weapons carefully, are liable—witness Cournot's mistakes—to go wrong. Professor Edgeworth finally establishes, in agreement with Bertrand and

others, that, contrary to Cournot's view, "when two or more monopolists are dealing with competitive groups, economic equilibrium is indeterminate." This conclusion, it may be remarked in passing, has a very important practical significance in regard to proposals for attacking "Trusts" by breaking them up into their component parts: the result of this may be, not to restore "competition," but to bring about a régime of unstable "multiple monopoly." Another practical consequence is noticed by Professor Edgeworth himself. If every trade were unified into a monopolistic body, there being nothing determinate to investigate, abstract economists would be deprived of their occupation; "there would survive only the empirical school, flourishing in a chaos congenial to their mentality." A difficult division of this article deals with the complications which arise when monopoly is combined with correlations of demand and supply for different things—complications which would seem to defy analysis by purely literary methods. The broad result is to emphasise the wide range of possibility that is present when monopoly prevails. Analytically, as Professor Edgeworth himself points out elsewhere (Vol. II. p. 94, footnote), the reason why fewer conclusions can be laid down as certain under monopoly than under competition is that the signs, not only of the first but also of the second differential coefficients of the demand and supply functions are relevant factors.

Of the 247 pages in the section headed Money all but 36 are devoted to papers on Index-numbers. Among these the chief are the very important memoranda prepared by Professor Edgeworth for the British Association Committee in 1887–9: but there are also other valuable pieces, notably that entitled *Professor Wesley Mitchell on Index-numbers*, which was published in the ECONOMIC JOURNAL in 1918. The British Association Memoranda were path-breaking studies in a region at that time very much less familiar than it is now. They are of a kind to which the term "classical" may properly be applied. In a subsequent article (1894) there is the interesting and important suggestion that, owing to the fact that the satisfaction which people derive from their real income depends largely, not on its absolute magnitude, but on its magnitude relatively to that of their neighbours, a standard so arranged as to make a pound purchase a constant amount of labour would also make it purchase an amount of satisfaction not very far from constant, even though, with increasing command over nature, it involved a large fall in commodity prices (Vol. I. pp. 344 and 346). Insufficient attention

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seems to have been paid to this point in later discussions. In the prefatory note to the 1918 article Professor Edgeworth claims, "that an index-number may be more than a register of a change in the value of certain specified articles; that there is an average trend of prices which may be expressed by methods other than those of a commercial account. This view is more acceptable now than it was thirty-five years ago. It is recognised in theory by Professor Mitchell and realised in practice by Mr. Flux" (Vol. I. p. 384). A subtle issue, and one, as it seems to the present writer, not even yet completely clarified, is suggested by these words.

The second volume opens with the important and well-known articles on the *Pure Theory of International Values* and the *Pure Theory of Taxation*, published in the ECONOMIC JOURNAL in 1894 and 1897 respectively. In accordance with his usual practice, Professor Edgeworth employs successively the tools of ordinary language and those of geometrical and algebraic analysis. It is curious to note that a proof offered of asymmetry between the effects of import and export taxes, which the author at first claimed as peculiarly due to the mathematical method, was afterwards found to be incorrect—to be valid of certain taxes in kind, but not of taxes, as they are actually levied in money. This error, which Professor Edgeworth, of course, long ago acknowledged and set right, entitles literary economists to some friendly mockery. Still, the fact that an expert in the Russian language once made a slip does not, we may invite them to remember, prove that to remain in ignorance of that language is the whole duty of man! The paper on the *Pure Theory of International Trade* and that on the *Pure Theory of Taxation* alike suffer, as we read them now, from the fact that ground which has, largely as a result of Professor Edgeworth's own work, become moderately familiar, was, when these papers were written, but little traversed and imperfectly surveyed. This is true both as regards the incidence of taxes and as regards the issue between the principles of minimum sacrifice and of equal sacrifice. When discussions written long ago are reprinted, or, as with some of Marshall's work, printed for the first time, many years afterwards, it is very easy to forget that, if they had not been written (or their substance taught), what now seems familiar in them would not have seemed familiar. The crime that Shakespeare committed in putting into Hamlet's mouth so many hackneyed quotations is one for which there are extenuating circumstances!

The last article of this section, following on a series of dis-

cussions connected with the questionnaire of the Royal Commission on Imperial and Local Taxation and dealing mainly with urban rates, is one reprinted from the ECONOMIC JOURNAL of 1920 under the title *Formulæ for graduating Taxation.* In this article Professor Edgeworth argues that the Royal Commission on the Income Tax "seems not to have done justice to the use of mathematical formulæ for the purpose of interpolation" (Vol. II. p. 270). Possibly there is some misconception behind this criticism. The Commission, rightly or wrongly, made no attempt to modify the general trend of the existing income-tax scale, but were greatly exercised to smooth over the five or six unfair and evasion-producing jumps found in it. There was no objection to accomplishing this by means of a mathematical formula; for, of course, the Commission's own scheme (though probably not all the members realised the fact !) can be represented by such a formula. It was deemed essential, however, that any formula employed should be such that, for the main body of incomes subject to assessment, it could be applied by means of abatements; for otherwise, as witnesses with administrative experience very strongly maintained, it would be beyond the power of the Revenue officials to deal satisfactorily with incomes consisting of parts assessed in different places, with adjustments consequent upon such things as the vacating of a house in the middle of the income-tax year, and so on. Had it been possible to make a scale of effective rates substantially equivalent to the old scale by means of a single rate and a single abatement, that would, from the point of view of administrative technique, have been the ideal arrangement. But that, of course, was mathematically impossible. The system actually proposed and now adopted was the nearest approach to that ideal which the Commissioners were able to attain. In the face of the technical evidence they would have assumed a very grave responsibility had they recommended any graduation formula that involved abandoning the method of abatement in favour of direct assessment at a continuing series of progressive rates.

In the section headed Mathematical Economics, which concludes Volume II, the most notable article is, I think, that entitled *Applications of Probabilities to Economics,* published in the ECONOMIC JOURNAL of 1910. This article, like the memorandum on Index-numbers, has a path-breaking quality. We have an organon of theory, but we have not, in general, the data necessary to enable us to draw actual curves of demand and supply. Consequently, we cannot employ our organon to determine quantita-

tively the effects of assigned causes. Professor Edgeworth suggests that we are none the less able to take some steps in the direction of this ideal; because there is an "unverified probability" —apart from specific facts—that our curves possess certain definable characteristics—that, for example, they do not abound in singularities, that an increase in one of the quantities represented "is attended with a (simply) proportional increase of the other throughout a trend of sensible extent" (Vol. II. p. 388). The need for something of this kind is imperative, particularly in connection with monopolies, if we are not to be reduced to complete nescience. Thus, it can be proved that in conceivable conditions a tax upon first-class railway fares will have the effect of *lowering* both first and third class fares. Is it reasonable to suppose that the conditions appropriate to this result are realised in fact: is the result a likely one, or an unlikely one; and so on? Professor Edgeworth has answers to questions of this type. On similar lines he defends three important *probable* propositions concerning discrimination. The last of these is as follows (Vol. II. p. 407):—"Probably if the disturbance of prices caused by discrimination is not considerable, the portion of the monopolist's maximum which is due to the infliction of loss on the customers is inconsiderable"—from which it follows that, for a small payment, the monopolist might be induced so to modify his price system as to produce a substantial social gain. This article concludes as follows:—"The sun of full knowledge may illuminate part of our course. There may be enough of that daylight to enable us at least to select the proper path, which may then be pursued in safety by the star-light of probabilities" (p. 426). The path is difficult, and for any but a master-cragsman, dangerous; but it leads to a region seldom visited and challenging to the brave.

The reviews that constitute the third volume—with which perhaps some of the lesser papers in Volume II might appropriately have been associated—illustrate the charming courtesy of Professor Edgeworth's criticisms. An author, whose carefully constructed edifice has been as carefully knocked down, cannot but be soothed by reading above its ruins an inscription such as this: "On the whole I see no reason to modify the opinion that the theorem in question is neither quite true nor very important. If it could have been saved it would have been by the more abstract part of Professor's . . . brilliant reasoning." I shall not, naturally, attempt to review reviews, but shall content myself with observing that among the authors whose works are considered are the

following important writers: Marshall, Sidgwick, Böhm-Bawerk, Pareto, Pierson, Dr. Keynes, Professor Fisher, Professor Bastable, Professor Nicholson, Professor J. B. Clark, Professor Dietzel, Professor Colson, Professor Cassel and Professor Loria.

In the course of these three volumes Professor Edgeworth more than once makes use of metaphors from the art of mountaineering. "Both species of double standard (bimetallism and symmetallism) may be compared to the rope by which mountain climbers are mutually secured, upon the principle that two parties are not likely to slip at the same time. Both the monetary cords are difficult to attach; but the bimetallic species has the further disadvantage that, when one of the parties falls over a precipice the rope is cut" (Vol. I. p. 441). It would have been possible to extend this analogy by taking into account possible differences between the normal stability of the two climbers and the factor of safety introduced by elasticity in the rope! Again: "Suppose, as a party of mountaineers pass up a steep slope, the opposing crest gives way, and they are carried down by a sort of avalanche, and landed on a new inclined plane. Again they urge their toilsome way upwards; and again, before the crest is reached, they are precipitated on to another ledge below; and so on till they are brought to a stop on some steep and comparatively firm slope" (Vol. II. p. 88). This nightmare-like conception is used in an ingenious manner to illumine the nature of competitive industry obeying the law of increasing returns! To one who has shared with Professor Edgeworth the privilege of membership of the Alpine Club it is a pleasure to read these things. Perhaps he may be permitted to contribute an illustration of the same character. Professor Edgeworth and Alfred Marshall are alike in that both have been accustomed to the heights of abstract thought. But Marshall went there stealthily and in secret. He deliberately wrapped himself about with the greatcoat and other insignia of the valley walker. He pretended, for the benefit of business men, either that he could not and would not dream of abandoning the plains, or, if accidentally detected upon a summit, that all his mountains were flat and all his discoveries platitudes! Professor Edgeworth's method is quite different. There is no concealment about *his* journeys. He positively flaunts ice-axe and crampons and rubber shoes in the face of outraged domesticity: nobody who offers to accompany *him* need have any doubt as to the class of expedition that he will be called upon to undertake! Naturally, therefore, he must defend his practice; for there are many who look askance upon these difficult

adventures. This is one of his defences : " I hope that in academic circles it may be allowable not to construe use narrowly. There still is room for the studies which the Greeks attributed to theoretical science, as distinguished from practical sagacity, which Aristotle characterised as wonderful, and hard to be attained to, and sublime, but not immediately useful, nor directly applicable to the service of humanity" (Vol. I. p. 7). There is also something further : " An outline of theory so abstract [he is referring to his discussion of distribution] is not to be despised as useless. It satisfies a legitimate curiosity. It is part of a liberal education. It is comparable in these respects with an elementary knowledge of astronomy. Such knowledge will not be of much use in navigation. And yet it has a certain bearing on real life. The diffusion of just notions about astronomy has rendered it impossible for astrologers any longer to practise on the credulity of mankind. A knowledge of first principles affords a test by which the authority of those who offer themselves as guides may be established. A little science has a further use; it is of assistance in obtaining more" (Vol. I. pp. 50–1). In the words which he quotes elsewhere from Dupuit, " Quand on ne peut savoir une chose, c'est déjà beaucoup que de savoir qu'on ne sait rien." Again: " Correct theory has a use beyond its immediate application to practice; a dialectic or controversial use. Those who appeal to theory shall go to that tribunal, even though it is not final. There is here a legitimate sort of *argumentum ad hominem*; for which it is not easy to find a parallel among the older sciences. . . . In the race of the sciences we are, as it were, handicapped by having to start at a considerable distance behind the position of mere nescience. An effort is required to remove prejudices worse than ignorance; a great part of the career of our science has consisted in surmounting preliminary fallacies" (Vol. I. p. 5). Some, no doubt, will hold that, though considerations of this kind justify an occasional ascent into the high hills of speculation, they do not countenance the prolonged sojourn there that Professor Edgeworth has made. But the most obdurate of critics will accept this word : " In the manufacture of economic wisdom each of us should expend his little fund of energy, partly on the fixed capital of the deductive *organon* and partly on the materials of historical experience. The margin of profit and loss in the intellectual, as in the external, world will differ with the personality of individuals. No general rule is available except that, like the cultivated Athenians, we should eschew the invidious disparagement of each others'

pursuits" (Vol. I. p. 11). Very few economists are equipped to take an equal part with Professor Edgeworth in his lofty climbs: not many are even qualified to follow on the rope behind him. But, standing by the telescope on the terrace of our hotel, the least venturesome among us can watch and admire and congratulate. We can place upon our shelves with gratitude this record of high expeditions brilliantly conceived and gallantly carried out.

A. C. PIGOU

AN APPROACH TO THE THEORY OF BUSINESS RISKS

I

A COMPLETE solution by any community of its primary economic problem of Production requires that it shall achieve the full satisfaction of its material wants. But any near approach to the attainment of this end is opposed by two conditions. As the result of our situation in an order of nature imperfectly adapted to our needs, we must expend energies in transforming air into wheat and ore into pots and pans: we are compelled to undertake costly operations in order to overcome the resistances which the materials at our disposal oppose to their translation into forms and places more to our liking. Further, as a result of the obscurity of the conditions in which we are situated we are compelled to carry out these operations not in the full light of day but, as it were, in a perpetual economic twilight, with the result that means cannot be closely and continuously adjusted to ends and the efficiency of our operations is consequently impaired. The satisfaction of our material wants is then opposed by these two conditions: the one, the *intractability* of the natural resources at our disposal; the other, the *incalculability* of the results of the operations by which those resources are adapted to our needs.

There is no need to discuss in any detail the nature of the costs arising from the intractability of our resources; they consist of the Working and Waiting which would be necessary even though the economic product (*i.e.* the value) resulting from their operations were completely calculable. Nevertheless, in order that they may be clearly defined, two observations should be made. It should be noticed, first, that the assumption of complete calculability which is necessary in order to isolate the first set of costs does not necessitate the assumption of omniscience. Complete calculability is compatible with very imperfect knowledge. Just as the physical product of a technical operation in a laboratory may be perfectly calculable in spite of our imperfect understanding of the properties of the materials employed, so the economic product of a business operation

might be perfectly calculable in spite of our imperfect ability to develop the full efficiency of the resources engaged. This point is raised only in order to make it clear that the distinction between the two kinds of real cost under consideration is not that between perfect and imperfect knowledge. It should be noticed, further, that this first group of costs includes a loss of productive efficiency arising from the circumstance that in the presence of change, even if that change is fully foreseen, the intractability of the appliances of production hampers their readaptation to new conditions. If an hotel proprietor could estimate exactly the seasonal inflow of visitors during the year; if a farmer knew in advance the conditions to which his growing plants and live stock would be exposed, neither could so adapt his resources as to avoid the social loss arising from the existence of change. So long as our modes of production are not completely flexible, therefore, perfect adjustment of means to ends is unattainable even if conditions are completely foreseen. With these two considerations in mind we may set aside this first limitation upon our power to satisfy our material wants and pass on to the second limitation, with which henceforward this paper is alone concerned: that arising from the incalculability of the product of economic operations. It will be convenient to consider first what are the real costs of this incalculability from the point of view of society as a whole.

The real social costs of Risk and Uncertainty.—The immense complexity of the processes by which the future grows out of the present inevitably makes impossible any full understanding of the conditions determining the economic results of productive operations and renders these results partially incalculable. This incalculability does not work indifferently for or against productive efficiency; in the long run it works consistently against it. Just as rough winds at Bisley are more likely to turn the moving bullet away from than towards the centre of the target, so random events acting upon a business organisation adjusted to a highly specialised end are more likely to hinder than to help.

The presence of this incalculability impairs the close and continuous adjustment of means to ends and so reduces the average efficiency of productive resources. It gives rise to two conditions which need first to be examined from the point of view of society as a whole. Its immediate effect is to attach to all economic operations Risk in the sense of *an unrelieved probability of loss.* Its ultimate effect is to cause an actual realised

loss which may be expressed in terms of a set of additional real costs of production, or alternatively in terms of a net loss of utilities. The immediate effect is unsubstantial. If its significance is to be appreciated and its importance measured, it must be, it would seem, by reference to the more definite ultimate effect, the realised loss. In discussing the probability of loss and the realised loss associated with it, from the point of view of society as a whole, greater stress, therefore, is laid upon the latter.

The attainment of full productive efficiency requires that the elementary parts of each economic operation shall be so engaged that each yields continuously its maximum contribution to the value of the output. It has already been seen that, owing to the presence of change, so exact an adjustment would be unattainable even if the results of the operation could be completely foreseen; but with this source of disturbance the argument is no longer concerned. It is concerned only with the consideration that the close and continuous adjustment of resources to wants is impaired by the condition that in actual life the economic results of the operation are imperfectly calculable; and with the secondary consideration that the precision of the adjustment is further impaired by the condition that the imperfect flexibility of the resources employed hampers in greater or less degree their rapid readaptation to changing conditions which cannot be fully known. Not only are the operations of any business man exposed to the disturbing influence of events which he can only imperfectly foresee, but his power to meet these events when they occur is hampered by his inability rapidly to readjust the specialised means of production under his control in response to the new conditions which have been disclosed. A railway company may construct a new line in anticipation of an increase of traffic which in fact is not realised; its error is the more costly for the reason that its embankments and bridges cannot subsequently be diverted to meet an expanding demand for products other than services of transport. Similarly an investor in a security with a poor market must be compensated in the form of a lower purchase price for his inability to withdraw his capital at will in order to meet any emergency or opportunity to which a change in his individual circumstances may subsequently give rise.

The continuous maladjustment of resources, with the consequent waste of productive capacity, arising from the incalculability of the results of economic operations evidently entails a

heavy social loss. A municipal gas undertaking may be able to adapt its plant so exactly to a steady demand that it approaches to 90 per cent. of full efficiency; a jobbing builder may fail to attain to 60 per cent. of that ideal. "In but few [manufacturing plants]," writes an American observer, "are the machines and equipment in active use more than half the working time." By how much would the expenses of production of a ton of iron be reduced if our blast furnaces could be kept continuously in commission? By how much is the National Dividend reduced because our textile factories, shipbuilding yards, merchanting agencies and so on cannot be so adjusted each to its particular demand that the whole is maintained in continuous operation at its full capacity? It is clear that the loss is very great. It seems clear, too, that the greater part of the loss is due to this condition of incalculability.

The situation, then, is this. The obscurity of the conditions in which economic operations are conducted, reinforced in its effects by the intractable character of our productive appliances, causes the economic (*i.e.* the value of the) product of these operations to become partially incalculable; and this incalculability impairs the precision of economic adjustments and results in a heavy social loss. Corresponding to this realised loss is the probability of its occurrence, the condition to which the term Risk is applied. Business risks consist, then, in the probability of occurrence of all those losses, and only those losses, which arise from incalculability. But inasmuch as they arise mainly in the development of ventures whose prospects are not susceptible of precise mathematical expression, it is convenient to emphasise the fact that they depend more upon personal than upon actuarial valuations. This may be done by slightly amending the definition of Risk: by defining it not as the (actuarial) *probability*, but as the (individual) *expectation, of loss.*

The manner in which these Risks are distributed among individuals and the prices charged by these individuals for taking them are matters for later discussion; at the moment we are concerned with realised loss and its accompanying expectation of loss from the point of view of society as a whole.

The realised social loss associated with the presence of Risk is not satisfactorily defined simply as a diminution in output, for human effort is engaged to reduce that loss; and something must be said in a preliminary way with regard to the costs incurred in this reduction.

The immense growth of productive power during the past

century rests on an application on the grand scale of a simple principle of organisation. In its one aspect this principle is that of so arranging the supply of our productive resources that each unit is engaged continuously in producing its most valuable service. In its other aspect it is that of so arranging the demand for productive resources that the operation of making each product is broken up into its elementary processes and each simple process thereby adapted to the employment upon it of highly specialised men and machines. The outstanding characteristic of modern industrial communities has been the application of this same principle to the work of organisation. It results in the delegation by the community to a special class of independent administrators of the supreme industrial function of adjusting social resources to social ends. The task of organising is not indeed wholly transferred. Many tens of thousands of working farmers, artisans and small shopkeepers still retain this work, remaining both work-people and entrepreneurs. Indeed in some degree every party to production assumes some part of the work of directing resources into their various uses. But these are only modifications. It remains true that some four-fifths of our cultivable land, a very large part of our capital and most of the services of Labour pass under the control of this special class of business men. Whatever may be thought of the performance of the entrepreneur, it is evident that his function is of the utmost social importance, that he is indeed the moving spirit of the whole great enterprise. For the transfer to him of so large a part of the services of the other parties to production causes their earnings to become intimately dependent upon his capacity to readjust those resources rapidly and efficiently in response to adversely changed conditions and new opportunities. The first line of defence against the losses resulting from the incalculability of the results of economic operations lies, then, in this device of developing specialised organising capacity in the person of the entrepreneur and of transferring to him the task of selecting and dealing with the risks associated with the conduct of productive operations. In each industry and in each occupation the ability to reduce this social loss, that is to say, the supply of this service of risk-taking, depends upon the presence of an adequate number of business men with the initiative, the special knowledge and the resources requisite to deal with its particular risks.

The real social costs of business risks may then be provisionally expressed in terms of these two things: the expenditure of

the additional organising ability by which they are in part extinguished, and a residual reduction in the efficiency of productive resources; together, a reduction in the size of the National Dividend.

There are within easy reach of the imagination forms of industrial organisation in which the realised costs of Risk would be limited to those just described; in which they might be fully expressed in terms of a reduction in the size of the Dividend. An instance would be a system of State Socialism in which the whole of the national income would be pooled and distributed in the form of salaries and wages so regulated that their individual purchasing power showed no appreciable variation from year to year. In such a system individual incomes would certainly be subject to slight variations as a result of changes in particular prices, but the loss of satisfaction from that cause might well be negligible. But the situation is different in a form of industrial organisation characterised by the presence of innumerable independent producing groups each in charge of an entrepreneur working for private reward.

Let it be noticed incidentally that each of these groups works within its own price frontiers, and that the multiplication of these frontiers increases the difficulty of adjusting resources to demand and so attaches to the operations of each group an additional set of Risks. At times when it is hardly profitable to make pig-iron, independent collieries may have to shut down, but collieries integrated with blast furnaces may be maintained in full employment. But against this influence working to increase Risk must be set the fact that a mode of organisation which relies upon the independent entrepreneur enlists very strong motives in the service of economical production, and tends steadily to select and develop the organising capacity by which Risks are destroyed.

That, however, is not the important issue. What it is desired to emphasise is that in our present form of organisation the realised costs of Risks are not limited to those described in an earlier provisional definition; they are not fully measured by the simple reduction in the size of the Dividend which has been described. It is true that in a Socialist State this loss of Dividend, spread over aggregate income, might have no appreciable effect on the stability of individual earnings. But in an organisation based on independent producing groups the expectation of loss on the part of any group may differ widely from its corresponding realised loss; so that the aggregate loss falls unevenly on those

groups and sets up fluctuations in the individual earnings of its members. In actual conditions, then, an imperfectly foreseen event, such as a variation in market price, has a double effect: not only does it disturb the adjustments of production and so reduce the size of the Dividend, but it also disturbs the mechanism controlling the division of the produce and causes individual incomes to become imperfectly calculable. It injures both Production and Distribution. There are, then, these two things: the expectation of loss known as Risk and associated with realised loss in the form of reduced efficiency of production; and the likely error of that expectation known as Uncertainty and associated with realised loss in a form about to be described as a reduced efficiency of individual incomes.

The real social cost of this condition of Uncertainty may be expressed in two ways: either as a (usually disagreeable) mental state; or in terms of the loss of satisfaction due to the lower efficiency of an uncertain income as compared with that of a certain income of similar amount. The choice between these two modes of expression has some theoretical significance. When this cost is being considered as the regulator of supply, it would seem appropriate to employ the first mode of expression, for it is evidently the mental state which governs action. But that use of terms introduces difficulties. For inasmuch as uncertainty of income is in some cases positively attractive to the investor, it must *sometimes* impose on him no real costs in terms of a disagreeable mental state; though it must *always* impose on him real costs in terms of a less complete satisfaction of his economic wants. And a social device which reduced the Uncertainty attaching to these attractive forms of income might be said to have increased social costs expressed in terms of a mental state, though it had reduced social costs in terms of the satisfaction of wants. The matter is not simple and reflection adds to its complexities. Possibly the most convenient way of looking at it would be one that assimilated it to the theory of the real costs of Waiting. As the *economic* deterrent to Waiting is derived from the deprivation of present satisfactions, and as its effect on supply is modified in varying degree by non-economic influences present in the personality of the individual who Waits, so the economic deterrent to Uncertainty-bearing may be regarded as derived from the deprivation of satisfaction due to the difficulty of administering an uncertain income, and similarly modified by the personality of the individual who undertakes to bear Uncertainty. In a variety of

cases, for example, those of work-people employed in fluctuating trades, the real costs due to uncertainty of income may not exert their appropriate influence in the mind; but the more completely conduct is governed by calculated business considerations, the more certainly will these real costs influence the willingness to bear Uncertainty, and the more confidently may we assume that they enter at their true money value into expenses of production.

For present purposes the more convenient method is to express the costs of Uncertainty in this more objective form: in terms of the loss of satisfaction due to the reduced efficiency of income and of the expenditure of organising ability by which that loss is reduced. The incalculable irregularity in the wages of a bricklayer might by rational administration be extinguished by the accumulation of a reserve. As, in fact, it is unlikely to be so extinguished, the real loss is seen in the condition that his wages are less effective in satisfying his wants. To the business man the uncertainty of his receipts implies that the resources at his disposal cannot be fully and effectively employed in his operations; at one time he has surplus funds which must remain temporarily unemployed; at another he is arbitrarily deprived of the means to maintain his undertaking at its full efficiency. A moderate degree of Uncertainty may be met, as is commonly the practice, by the provision of reserves; its cost is then measured by the reduced yield on those funds. A larger degree of Uncertainty may, however, result in so deep a cut into his capital that the injury may be irreparable. In actual conditions, as will be argued later, the real costs of the disturbances arising from these arbitrary surpluses and deficits is very greatly reduced by the presence of the Money Market, which in effect holds an immense common reserve for the common use; but in spite of this device of a common purse, Uncertainty still imposes an appreciable if not a heavy real social cost.

The point has been very clearly expressed in an illustration employed by Professor Clark. He imagines a business man employing a capital of 10,000$ whose successive units of 1000$ have an importance represented by the figures 1, 2, 3 . . . 10; and argues in this way. "If, now, there is just one chance in a hundred that, during the coming business year, the man's entire capital will be swept away, he must anticipate a gain of 1 per cent., not on his actual capital, but on the 55 units [1000, 2000, 3000 . . . 10,000 = 55,000$] that represent its importance to himself. He must during successful years make

$5\frac{1}{2}$ per cent. of his capital as a compensation for exposing it to the [1 per cent.] chance of a total loss." The argument is a familiar one, as is its corollary that the real cost of exposure to the chance of a loss or gain of a given amount declines as the size of the fund on which it falls increases.

These, then, are the immediate conclusions. Incalculability of the results of economic operations gives rise to two forms of real social cost. By impairing the adjustment of resources to wants it results in a realised loss which reduces the size of the Dividend and creates an expectation of loss which constitutes Risk. Further, by disturbing the distribution of the Dividend it causes individual incomes to become imperfectly calculable, thereby reducing their efficiency and creating an expectation of irregularity which constitutes Uncertainty. From the point of view of society as producer, these costs may then be expressed in terms:

(1) Of the expenditure of the organising capacity by which these losses are reduced;

(2) Of a reduction in the real incomes of the producing parties as a result of the imperfect use of their productive powers; and

(3) Of a reduction in the efficiency of individual incomes as a result of their uncertainty.

The payment for bearing Risk and Uncertainty.—The argument in its second stage passes from considerations of Production to considerations of Distribution; from the effect of incalculability on real costs to its effect on expenses of production. It is concerned with the manner in which society reacts to the pressure of Risk and Uncertainty so as to evolve payments to those willing to take them. This aspect of the matter is very conveniently brought out by a conception developed by Professor Pigou, which clearly discloses the nature of the mechanism which determines the payment made to the parties who bear these costs.

Let us deal first with the payment for Risk. Just as the heavy real costs of work in such arduous occupations as puddling or hand-charging steel furnaces check the flow of labour into those occupations until their rate of pay rises by an amount which compensates the workman for the extra exertions they require him to put forth, so the expectation of loss arising from the incalculability of economic operations deters the entrepreneur and checks the flow of his resources into risky industries

until his prospective profits are raised by an amount which compensates him for the additional real costs they require him to bear in consequence of the reduced efficiency of his operations.

In the infancy of an industry, when technical and economic adjustments are very imperfect, the economic results of its operations are likely to be highly conjectural. But as it advances towards maturity, experience gradually discloses the importance of many of the Risks to which it is exposed. The spinner learns the cost of momentary stoppages due to broken threads, the potter the proportion of his wares injured in the processes of firing, the ship-owner the wastage of his property on the seas; and each trade gradually forms its rough estimate of the degree in which the operation of its plant will fall short of its full productive efficiency as a result of the irregular demands of its markets. As the average value of these Risks is gradually revealed, that value passes more and more certainly into expenses of production, and the realised money costs of Risk are recovered more and more surely from the consumer. But in fact, of course, this tendency is not fully effective. The range of imperfectly foreseen events extends from the calculable average of the spinner through the partially known fluctuations in market conditions and the chances of Trade Disputes to occurrences increasingly uncertain in their incidence and increasingly important in their effects. And the result is that the entrepreneur is exposed to the disturbing influence of events whose realised costs may differ widely from his expectation.

Accordingly, when the entrepreneur, dealing with these as he deals with other costs, has included in his expenses of production a charge which amortises his expectation of loss, he has not yet obtained full compensation for the whole of the real costs resulting from the incalculability of the results of his operations. For the addition that he has made to his expenses of production covers only an *expectation*; he cannot be sure of either the temporal incidence of his realised losses or of the degree in which they will diverge from his expectations; and the consequent incalculability of his returns imposes on him a further real cost for which he is entitled to obtain compensation. Does he, in fact, obtain payment for this Uncertainty of income?

It would be supposed that under the rationalising influence of business, a condition which at one time threatened the entrepreneur with bankruptcy and at another put him in command of resources in excess of his immediate business needs would almost always result in an addition to his expenses of produc-

tion. And such facts as are readily available would seem to bear out this presumption. The figures of the yields at current prices (based on the last dividend paid) of 43 miscellaneous dividend-paying companies in December 1911, and of 60 such companies in July 1923, show that the average yield on the Ordinary stocks exceeded the average yield on the Preferred stocks in the one case by 19*s.* 3*d.* per cent. and in the other by £1 1*s.* 11*d.* per cent. Taken in conjunction with the fact that the current prices of the dividend-paying stocks of such uncertain ventures as mines are commonly set at a level which yields a very high return, these figures strongly suggest that in business generally Uncertainty is a deterrent to investment and that it will be borne only at a price.

The matter may be looked at from another point of view. The consumers of the products of any industry pay over to the producing parties in the form of higher prices a total sum in excess of what they would be required to pay for a similar output if the operations of the industry were perfectly calculable. This sum is separable, perfectly in theory, imperfectly in practice, into two parts. The first and by far the most important part is the payment for Risk. It consists of a remuneration for the additional organising capacity requisite for the continuous readjustment of resources to imperfectly known and changing conditions, and a compensation for the expectation of loss arising from the discontinuous employment of plant and other wastes of productive power which organising capacity is unable to eliminate. The second part, of relatively quite minor importance, is the payment for Uncertainty. The necessity for this further payment arises from the fact that the realised loss falling upon the producing parties in any period may vary more or less widely from that expectation of loss which has entered into their estimates of expenses of production. It consists, therefore, of a remuneration for the additional organising capacity requisite for the administration of an imperfectly calculable income and of a compensation for the reduced efficiency of that income either in the direct satisfaction of wants or in the conduct of business. To these additional payments made by the consumer there correspond, of course, two additions to expenses of production; together, therefore, they represent the money measure of the real costs arising from the Incalculability attaching to the conduct of economic operations.

The mechanism of Distribution in this particular field works, then, in this way. Business men refrain from investment in any

industry, and thereby raise the price of its products, until there appear prospects of gain which are sufficient to amortise the expectation of the losses they will incur from the impaired precision of their adjustments, and also to compensate them for the Uncertainty resulting from the fact that this expectation is liable to error. In other words, the inducement to invest presented by any venture is represented not by an offer of a single certain return, but by its offer of a set of prospective returns whose "actuarial value" as estimated by the investor covers these two additional real costs.

The conception may be developed a little further. It seems clear that in the actual business world the set of prospective returns offered by any venture cannot very usefully be conceived as having an actuarial value determined by objective calculations and expressed as a single quantity. We approach more nearly to the facts when the prospects of each venture are conceived as having a number of different valuations, each one being the result on the part of a particular entrepreneur of a personal estimate based in part on a half-instinctive valuation of the nature of the opportunity, in part on the quality of the organising ability which he can employ in its exploitation. Moreover, the matter is not, of course, one which is completed by a single decision. The situation into which the entrepreneur passes when he enters upon the venture is one of incessantly changing conditions, of incessant readaptation of resources and of a continuous revision of expectations. And these expectations are liable to be disproportionately influenced one way or the other by experience of recent success or recent failure on the part of himself or of his fellow-entrepreneurs.

Incidental considerations.—The circumstance that the realised returns of each entrepreneur depend not only on a right choice of risks but also on the quality of the organising ability brought to bear upon them is emphasised here for the purpose of drawing attention to certain further considerations.

In a riskless world, or in the conduct of a technical operation whose physical product was perfectly calculable, there would be a need for organising ability, if only to effect the initial adjustments in each operation: the ordering of the elementary parts so that each made its maximum contribution to the product. In the actual world the need is immensely greater; for organising ability must assume the responsibility for effecting and maintaining continuous adjustment of means to ends in response to conditions which are continually changing and only partially

known. It is, then, this condition of Incalculability which constitutes the main source of demand for the complex of faculties and energies included in the term organising ability. And inasmuch as the main part of the work of meeting this demand is transferred by the other parties to production to the group who specialise in the supply of this organising ability, this group of entrepreneurs must be regarded as engaged almost wholly in the work of "risk-taking."

The circumstance that the entrepreneur is engaged almost wholly in reducing the real costs of Incalculability, together with the circumstance that these costs are very heavy, suggests a further consideration. The striking differences in the profits obtained by entrepreneurs even when engaged in similar ventures is to be explained in part, no doubt, simply by luck. The Uncertainty which in some degree always attaches to the estimates of the cost of Risk which they include in their expenses of production must inevitably result in arbitrary fluctuations in their profit and loss accounts. But the main cause of these wide differences must lie, it would seem, in the great scope for economy offered to men of exceptional ability by the heavy real costs of Risk, and in their varying ability to meet these Risks, whether in their technical control of production, their conduct of trade disputes or their anticipations of the future conditions of markets. The same point may be put in a slightly different way. In any industry the addition which the representative firm makes to its expenses of production in order to "cover its risks" is very substantial; and the realised losses sustained by the individual business men who take these risks diverge widely from this representative estimate; the reason for these divergences lying, it is urged, partly in the occurrence of good or ill luck, but principally in the marked differences in the quality of the organising ability brought to bear upon these risks by individual entrepreneurs.

It may be worth while to submit this final consideration: that any full treatment of the mechanism by which society "reduces its risks" calls for a discussion not only of the devices by which it reduces the costs of Uncertainty, but also of those by which it reduces the far heavier costs of Risks: a discussion, that is to say, of the whole costs of Incalculability. The two real costs have a common origin and are intimately associated. The cost associated with Risk may be expressed as a reduction in the efficiency of productive resources, that associated with Uncertainty as a reduction in the efficiency of income. It is

true that the payment for the former passes into expenses of production as an addition to each of the individual components of expense—cost of materials, depreciations, earnings of management and so on; while the payment for the latter appears in the more distinctive form of an addition to net profits; but this difference is little more than a matter of book-keeping; it does not seem to represent any vital distinction. It is true also that the business world contains a few examples of devices whose effect consists in the reduction of one of these costs exclusively. For example, the economy effected by a Fire Insurance company is solely that of reducing Uncertainty; its operations have no appreciable effect on Risk, for they do not reduce the expectation of loss from fire. But business organisation does not usually express its meaning with such lucidity. Far more representative would be a device resulting, let us say, in greater stability in the price of pig-iron: a result which would both lessen the maladjustments of production and make more calculable the incomes of iron-masters. Indeed it is evident that every reduction in the expectation of loss is likely to be accompanied by a reduction in the magnitude of the possible error attaching to that expectation; the moral being that the machinery for meeting Risk is inseparably bound up with that for meeting Uncertainty, and that a discussion of this machinery should cover both of the real costs arising from Incalculability. So complex a discussion needs separate consideration; no attempt has been made to deal with it in this paper.

F. LAVINGTON

N.B.—As this paper goes to press I find that I have wrongly argued that the *whole* of the loss of utilities resulting from maladjustments tends to enter into the expectation of loss of the producer and so into his supply price. The truth appears to be that some part of this loss of utilities falls directly upon the consumer. For when in place of a well-adjusted flow of commodity at stable prices the consumer receives an ill-adjusted flow at fluctuating prices, he clearly suffers a loss of utility. But this change does not necessarily imply any alteration in the average price per unit obtained by the producer or any alteration in his expenses of production per unit.

F. L.

NORTH CAROLINA AND THE NEW INDUSTRIAL REVOLUTION

"SUCH has hitherto been the rapid progress of that country in wealth, population and improvement, that in the course of little more than a century, perhaps, the produce of American might exceed that of British taxation. The seat of the empire would then naturally remove itself to that part of the empire which contributed most to the general defence and support of the whole."—Adam Smith, *Wealth of Nations*, IV. 7, Pt. 3.

1. A citizen of North Carolina, that "old North State" of some 50,000 sq. miles (nearly the size of England and Wales), with a population of 2½ millions, slightly more than two-thirds white and less than 1 per cent. foreign born or of foreign-born parents, apparently can say with truth all these things:—

"My house, or rather the house in which I live, is made of wood which quite probably was cut from the mountain forests of my State. It is lighted with the cheapest electricity in the U.S.A. My furniture was made at High Point, N.C., a furniture town second only in its output to Grand Rapids (Mich.), and rejoicing in a Furniture Exposition Building with six acres of floor space. My kitchen utensils were made at Baden, N.C., on the river Yadkin, the second largest Aluminum (*sic*) plant in the world. My towels come from Kannapolis, N.C., the world's largest towel mills: my table-covers from Roanoke Rapids, N.C., the largest damask mills in the U.S.A. My State produces more cotton goods than any other except Massachusetts: $52 millions in 1912, $229 millions in 1922. The stockings which I and my family wear were knitted at Durham, N.C., the hosiery centre of this continent. It is the fault or vagary of our distributive system if I eat any but native-grown foods—grape fruit and bananas excepted. For my State, which some years ago was twenty-second in the list, is now fourth in agricultural production, following Texas, Illinois and Iowa. N.C. has corn, wheat, sorghum, peaches and apples more than sufficient for its own people. Its raw cotton rose in value from $63 millions in 1921 to $104 millions in 1922; its tobacco from $65 millions to $93 millions. The boll-weevil has hardly touched us yet,

and we are ready for him, if he should come, with South-gotten calcium arsenate. Our largest town, Winston-Salem, the home of 'Camel' cigarettes and 'Prince Albert' smoking tobacco, is the largest tobacco market and the largest céntre of tobacco manufacture in the world. In N.C. we smoke and we work; and after a ten-minute lunch in a cafeteria or on occasion a half-hour *à la carte* meal at the Sir Walter, the O. Henry, or the Robert E. Lee, we jump into a high-powered Studebaker jitney[1] (with competing half-hourly services all day long from everywhere to everywhere else), and at an average speed of forty miles an hour we sample our State highways, of which 2000 miles (mostly paved) have been completed and as many more are in hand. In our villages there are as many public houses as in those of the Old World, but the signs are different. Instead of King Williams, Burton Arms, Threlfalls and Cains, we have filling stations brightly blazoned with Texaco, 'That Good Gulf Gasoline' and Standard Oil. Alcohol (they tell us) is the sheet-anchor of British finance. In N.C. spirit is consumed in the tank of an auto in preference to the human stomach, and the proceeds of the tax go to the State and not to Washington. With 3 c. a gallon on gasoline we pay interest and amortisation on our $77 millions of highway bonds, and our road experts aver that 'improved roads so lessen the consumption of gas per mile and the wear and tear on car and tires that the auto-owner actually makes money by paying a tax on gasoline in order to get good roads.' "—(*The South's Development, Manufacturers' Record* 1924, p. 282.) "However, not all the taxes go to the State. Though we have only 2½ millions population and no large cities, we are fifth in the list for amount of federal taxation. The tobacco tax revenue from N.C. in 1922 was $136 millions. But come and live here! For we grow and manufacture the tobacco, while the consumer pays the tax. House rents are only a half of those in the North, and a little coal for a short three months is all that is needed for warmth. If you cannot live here, come and see us. Drive one of those tourist cars of which one per minute passed down the Shenandoah Valley in the fall of 1924, there observing (we hope) certain spots which recall the memory of Stonewall Jackson."

2. North Carolina is much wider than it is long and it has three well-defined regions: the coastal plain, the rolling Piedmont

[1] Jitney is said to mean nickel (five-cent piece), just as Dixie is derived from Dixie bills in the Mississippi Valley, the French-lettered $10 (dix) bills which once circulated among the boatmen.

(the State capital Raleigh being on the border-line between the two) and the hill district of the Southern Appalachians. The Blue Ridge Mountains separate the most westerly countries of the State from the Piedmont, which, because it lies at the feet of these mountains, is so named. The Piedmont region follows the line of the Blue Ridge into South Carolina and has upon its whole area 73 per cent. of the manufacturing enterprises of the two Carolinas. In N.C. itself the industrial belt has the configuration of a broad-handled reap-hook with the handle resting on Gaston County and the tip of the blade touching Raleigh. Along the handle from Shelby W. through Gastonia to Charlotte E. there is an unbroken factory district resembling S.E. Lancashire. Gaston County alone has 100 cotton factories. Further north, on the outer edge of the blade, the cities of Winston-Salem, High Point and Greensboro' form an industrial triangle, within a seventy-mile radius of which live one million out of the 2½ million people of N.C. Greensboro' is the insurance centre of the Carolinas, having in the Jefferson Standard Life Insurance Company the largest life insurance company in the South. Situated on the main line of the Southern Railway, for which it is building a $1,300,000 Railway Depot (Station), and lying nearer to New York than any other important city in N.C., Greensboro' claims to be the "logical location" for a branch of the Federal Reserve Bank.

The orientation of N.C.'s commerce is the reverse of that which prevailed in the days before the Civil War. To-day it is North and South, then it was East and West. Railways were built in the States along the Atlantic seaboard within a year or two of the first railways in Lancashire, and in order to handle the same commodity—cotton. They were pushed inland from the Atlantic ports—from Wilmington, N.C., Charleston, S.C., and Savannah, Georgia, following the lie of the land in a north-westerly direction. Their purpose was to do what the rivers did less well, to bring down the cotton and tobacco to the coast. On their course they passed through a stretch of unprofitable barrens, and that was one reason why the State built the North Carolina Railroad from the coast to the mountains, and why it failed and was subsequently split up. Another and major reason was, that New York, with its more central position and happier political fortunes, was able to focus upon itself the traffic in people and goods to and from the West. Thus Wilmington and Charleston suffered as ports more heavily even than Boston and Portland (Maine). Moreover, the navigation along the coast of N.C.

from Norfolk to Cape Fear is in many places difficult owing to the river deltas, sand bars and narrow inlets. But the development of trade with the West Indies and South America (the Panama Canal having opened to the Atlantic seaboard both coasts of South America) is promoting a new orientation of ocean traffic. The leading Gulf ports have enjoyed in the last ten years phenomenal increases in traffic, Galveston a tenfold increase: partly because of this new orientation, and partly because the Mississippi States back of them are the main source of Europe's cotton to-day. The N.C. Ship and Water Transportation Commission in 1924 reported strongly in favour of a public port for N.C. Southport by Cape Fear appears to be the most promising site. Whether Southport, N.C., or Charleston, S.C., is the terminal point is mainly a matter of particular State advantage, but a great port for ocean traffic somewhere along this coast should carry with it as its complement a new artery of transportation through the mountains into the southern part of the middle west. The State highways have opened the mountains to passenger traffic. East-west railroads exist, but the railroad system requires reorganisation before N.C. and its sister state can valorise their continental hinterland. Just as the ports of Liverpool and Hull called into being the railway system across Lancashire and the West Riding of Yorkshire—the centre of the English cotton and woollen manufactures—so Southport, N.C., or Charleston, S.C., by their offers of new ocean traffic should shortly call into being a new trunk railway system from East to West, south of the Mason-Dixon line.

3. Why is N.C. becoming an industrial State? Why within N.C. is the Piedmont an industrial centre so strong that it is not only growing without pause, but drawing to it, as by *force majeure*, some of the textile trade of Massachusetts? N.C. possesses many favourable factors which in combination exercise a cumulative force.

(1) The Piedmont, like the West Riding of Yorkshire or the Valley of the Clyde, has a soil which is less fertile than that further east. It is one of the paradoxes of economic growth that regions of quick fertility, because they are easy and warm, carry less industry than those which must be industrial if they are to grow at all. This is true as between tropical and temperate zones, and true within a given zone, as between alluvial plains and rolling foothills. N.C. is the "Old *North*" State and the Piedmont is the temperate zone of N.C.

The mean temperature of the Piedmont is 59° F., and the

average precipitation for the State is 50 inches. The largest rainfalls occur in July and August, when the cotton and tobacco need moisture. In 1924, however, the cotton in some parts of N.C. was drowned out by excessive June rains. The humidity of the outside atmosphere in a cotton-spinning district is no longer a critical consideration, as the humidity inside the factory is controlled by a simple installation, the humidifiers, which hang from the ceiling like electric arc lights. The lowness of the "counts," by comparison with those of New England or Lancashire, is due to other things—namely, the youthfulness of the industry in the South, the standard nature of America's mass demand, and the employment, as generally in the U.S.A., of the easier and cheaper ring spinning, which is the modern adaptation of the continuous roller spinning done by Richard Arkwright on the water frame. In 1923, out of 34 million spindles in active operation the South had 16, *i.e.* nearly 50 per cent. (N.C. $5\frac{1}{2}$ and S.C. 5); but spinning coarser yarns it consumes over 60 per cent. of the cotton grown and consumed in the U.S.A.

(2) N.C. has cheap power: water power, steam (which means coal) power and oil power. N.C. itself has no oil and very little coal, but flanking it on the north-west are West Virginia and Kentucky. These two States in 1923 produced 141 million tons, seven-ninths of the coal of the South and two-sevenths of the coal of the whole U.S.A. Flanking it on the south-west at some distance are Oklahoma and Texas, which in 1923 produced nearly half the oil of the U.S.A. Moreover, the one great oil-field still to be tapped, that on the Gulf Coast, is nearer to N.C. than to the industrial North. But in addition the Piedmont has at its doors the power of its mountain rivers. Electric power is generated from water power and steam. N.C. has 360,000 developed horse-power out of a possible maximum of 2,000,000 under conditions of complete storage and flood control. The power available 90 per cent. of the time ("commercial power") is put by the N.C. Geological Survey at 578,000: that available 50 per cent. of the time 875,000. This latter can be made commercially usable if the several sources are combined in a system (as Bank resources are combined in a central reserve), if storage dams are built and auxiliary steam plants are used to supplement periodic deficiencies. By comparison with the American West, where great rivers are sometimes trickles six months of the year, the stream flow of the Western Appalachians is remarkably uniform and easy to control. But the industrial pace has been so quick that fuel has gained relatively to water in

N.C. since 1918. One h.p. = 746 watts, one k.w. = 1000 watts. N.C. consumed in 1920 a total of 732 million k.w. hours, in 1923 a total of 1313 million k.w. hours; but whereas in 1920 only 7 per cent. was generated from steam, in 1923 this percentage had risen to 17·9. However, by interconnections one State can draw on another. Thus in N.C. there are two great power companies, the Southern Power Company, and the North Carolina Power and Light Company. 1921–1922 were years of drought in the N.C. P. & L. Co.'s territory: therefore the steam plant of the U.S.A. Government at Sheffield (Alabama) was loaned to companies in the south-east: Alabama power being thus available for its neighbour Georgia, Georgia was able to supply the Southern Power Co., which in its turn released equivalent power sufficient to meet the deficiency of the N.C. P. & L. Co. Because of water-power development, increased efficiency of steam plants and interconnection of stations, the cost of electricity in the U.S.A. was 5·1 per cent. less in 1923 than before the War, notwithstanding the greatly increased cost of labour, coal and other materials. Where cheap power is, there are the industries gathered together.

(3) N.C. has its raw materials at its doors. It has at Mount Airy on the edge of the Blue Ridge Mountains –and once again the superlative may be used—the largest granite quarry in the U.S.A. It is still a leading State in hard and soft woods. In the furniture industry, which uses the gum tree very largely, more than one firm has protected itself against timber shortage for very many years ahead; for they hold large tracts in the swamps of S.C., where the risk of destruction by fire is slight. Cotton and tobacco, the two leading cash crops of the State, are the raw materials of its two most valuable industries. N.C. spins more than the one million bales it grew in 1923. It turns into stripped or finished tobacco, a tobacco crop which for 1920–3 averaged over 300 million lbs., and in addition it imports other tobacco for blending.[1]

(4) N.C. has within its boundaries or on its flanks important subsidiary industries. When a country grows and produces a leading raw material of industry, the types of subsidiary industry which tend to gather around it are three in number.

[1] For output of various kinds of tobacco, distribution of crop between home consumption and exports and relative importance of various forms of manufactured tobacco see Commerce Monthly (National Bank of Commerce New York), March 1925: *The Tobacco Industry in the U.S.A.* The output of cigarettes in U.S.A. rose from 13 billions (1910–14) to 71 billions (1924). The war accelerated the passage of the U.S.A. from a tobacco-chewing to a cigarette-smoking nation.

(*a*) Chemical industries supplying the ingredients of crop production.

(*b*) Mechanical industries supplying the machinery of the manufacturing processes.

(*c*) By-product industries utilising the by-products of the main product or products.

In N.C. these are represented by the manufacture of :—

(*a*) Commercial fertiliser.
(*b*) Textile machinery (in its infancy).
(*c*) Cotton-seed oil and cake.

The fertiliser industry in the South had its inception in S.C. more than fifty years ago through the discovery of rock phosphate. To-day two-thirds of the capital invested in the industry is in the South. In 1920 the South produced 7·6 million tons of fertiliser and consumed 5 millions. Georgia leads in production, N.C. being fourth; but the Carolinas run level as the leading consumers. Like banking in Great Britain and Canada, the industry has evolved along the line of numerous local establishments under large-scale control, represented now by the "Big Six." The product sold is the mixed fertiliser, combining the three elements essential to plant growth—phosphoric acid for fruiting and maturity, nitrogen for vegetation and growth, potash for vigour. Phosphoric acid, which forms about two-thirds of the plant food in commercial fertiliser, is yielded by the rock phosphates of the South; nitrogen by imports from Chile, and also as a by-product from coke ovens and packing plants. Down to the War Germany held a monopoly of natural potash, but during the War native sources were found in the brine lakes of the American West and the oil borings of Texas. Their use is a matter of development and cost; and meanwhile the "Big Six" have reached out to control supplies in Chile, Germany and elsewhere. The relation between the fertiliser company and the grower of tobacco or cotton is a study in itself, exhibiting a domination as far flung as that of the agricultural implement companies over the western grain grower, and much more oppressive.

The great bulk of the textile machinery is made in the specialised machine-making centres of New England—Worcester, Hopedale, Lowell, Pawtucket (Rhode Island), Whitinsville (the headquarters of the Whitin machine works) and the like; one large firm, Messrs. Howard & Bullough, being originally an English concern. In the days when there were no railroads and technical processes were secret—and it was at such a time

that the leading industries of Great Britain were localised—physical distance between machine-maker and machine-user was a grave handicap to the latter. To-day the handicap amounts to little more than a higher freight rate on machine parts. The machine companies install the machinery and some of them send service men periodically to the mills. Their experts can serve N.C. as thoroughly as New England; and indeed must, for it is there that the greater expansion is occurring. As late as 1919 the characteristic of the Southern textile industry was the multiplicity of small enterprises, and their numerical increase was sufficient to keep the size of the textile establishments in the U.S.A. constant for the period 1909–1919. But since 1919 there has been a trend towards (*a*) the financial control of many mills by a chain of interests; (*b*) the grouping of all the stages of manufacture, spinning, weaving and finishing, in or around a parent establishment of great size selling a standard product with a trade name. It is claimed that in 1924 $60 millions of New England money found its way to Southern mills for purchase or new building; but the $1 billion of capital invested in the textile industry of the South is mainly in the ownership and control of Southern men. There is, therefore, no atmosphere of dependence on a distant machine-producing centre. The South makes many of its cotton gins, the key machine of the first cotton process; Charlotte, N.C., and other Southern towns have plants engaged in making cotton cards and a few machine parts. In the denim mills of Messrs. Cone (White Oak, Greensboro', N.C.) the writer was shown a process of continuous warp dyeing invented by this concern. The machinery had been put together by the firm's shop and the fittings were rough; but with pioneer work such as this proceeding in Southern mills the machine-makers have as much need of the South as the South of them. Furthermore, N.C., though itself not a producer of coal and iron, is in the industrial atmosphere which coal and iron generate. For it is on the main lines of communication between Pennsylvania and Birmingham, Alabama, the great and growing iron and steel centre of the South.

In the third type of subsidiary industry, the utilisation of by-products, N.C. has an assured position because it is a great producer of cotton as well as a great consumer of it. Since these by-products per volume have a lower value than the main product, it is generally more economical to process them near to the point at which they emerge. On this fact rests the strength of the cotton-seed oil and cake industry of the South. The cotton

seed crushed in the South grew from a trifle in 1875 to nearly 5 million tons in 1914: during this period the value of cotton by-products and the method of securing them were learnt. From 1914 to 1923 the cotton crop declined from 16 to 10 million bales under the ravages of the boll-weevil; and the seed crushed declined correspondingly to some 3 million tons. Ginned cotton yields linter cotton by a second ginning in the proportion of 8,000 lbs. of lint to one ton of seed. The seed itself yields oil, meal and hulls. The oil is used in the manufacture of oleomargarine, soaps and perfumery. The meal and hulls, separately or in combination, are used as cattle feed. They might be used as a fertiliser on near-by farms, but their recent price has been too high to allow much to be consumed in this way. Memphis (Tennessee) is the head-quarters of the trade, but the plants are widely distributed; and there is no Hull or Marseilles in the American South. "The oil mill has been taken to the cotton fields rather than the seed to some oil-producing centre . . . it has allowed the most economical processes of assembling seed from the farmers and distributing meal and hulls to the farmers in turn. In many places it is a custom for the farmer to haul in his seed to the cotton oil mill and take meal in exchange." (*The South's Development*, p. 206.) Under these conditions the manufacture is seasonal. Thus in the winter of 1924–5 the Elba mill Charlotte, N.C., expected to run from October to April, working continuously with two twelve-hour shifts. When the plant shuts down the workers, who are coloured people, will find summer employment, as the tobacco stemmers do, in cotton picking, road work, hotel service, etc.

(5) Finally, N.C. has a labour supply, plentiful, adequate and cheap. In the cotton factories this labour is almost entirely white: in the spinning and weaving rooms exclusively so. Coloured labour is used inside and outside all industrial establishments for cleaning and carting: on all elevators: in tobacco factories in the stripping departments: in cotton seed and oil plants under white foremen: in cotton factories in the opening and dyeing rooms. Inside a factory, in contrast with work on the face of a quarry, coloured and white rarely work side by side. In short, in the industries of N.C. coloured persons do the work that newly-arrived immigrants would do in the North. The road construction gang is generally coloured, though the State in constructing its highways used a certain amount of white labour; for the bootleggers are mainly Anglo-Saxons.

The population of N.C. as noted in the opening sentence, is

3 to 1 white, and the proportion is not declining. This population is not maintained by immigration either from the North or from Europe. Italian stone-cutters are to be seen at Mount Airy: there are small settlements of Italians and Scandinavians in the truck lands by the coast. But almost the whole of the population, white and coloured, was born inside the State. Between 1910 and 1920 the population of N.C. increased 16 per cent., "due almost entirely to the virility and fecundity of our country people, white and black. . . . We lead the entire U.S.A. in cradles and baby carriages, with a birth-rate of 31·6 per mille against 23·7 for the U.S.A." (North Carolina Industrial and Urban: *N.C. Club Year Book*, 1920–1921.) Between 1910 and 1920 the economic incentive to increase of population was doubly strong. The cash crops of the State, tobacco and cotton, were rising steadily in value; and the wages offered in the factories, though lower than those paid in the North, were very much higher than anything heretofore enjoyed by these country people. Between 1910 and 1920 the numbers employed in manufacture and commerce rose by 74,000, and so strong was the city-ward drift that 19 out of 99 counties in the State showed a decline of population.

Many of the country whites live in the mountains. They are of pure Anglo-Saxon stock, which has been there for more than a century untouched by the tide of industrialism. Till recently the crack of the rifle has been heard more frequently than the honk of the motor horn; but the undeveloped water sites of the State are on the *further* side of the great Blue Ridge, and State highways are building for the attraction of tourists. When these are completed, mountain-bred school-children will be conveyed to consolidated schools in auto-trucks,[1] and the mountain veil will be for ever rent. In and around Winston-Salem are the intelligent and vigorous descendants of the Moravian Church, which founded Salem in 1753. All over the State Scotsmen (and, of course, many others) own garages, and one county is called Scotland. The writer met two families with familiar Midland names, Biggs and Dodd. The family of Biggs came from fifty miles east of Durham, English one side and Scotch on the other. They lived in a cottage rented at $35 a month (taxes, as always on this continent, included). The old mother of the family was keeping house, while her girls were making $20 a week in the adjacent mill, and her boys as much as $40 on silk-knitting machines, but

[1] School-children "auto-trucked" in N.C.:—1922, 20,000; 1923, 31,000; 1924, 48,000; 1925 (estimated), 65,000.

she feared the spinning-rooms with their risk of T.B. Her husband had been a farmer, growing cotton and keeping "a big gang of sheep," while she, as a young wife, spun and wove. It was then reckoned a disgrace to be dependent on outside resources for clothes. The family of Dodd had four boys and four girls. The boys worked on the home farm, and with the improved price of cotton were glad to "stay with it." (They were at the moment climbing Mount Pilot, on a Sunday afternoon, having parked their car at the foot.) But the girls looked hungrily towards factory life with its regular wage, its ornamentation of clothing and amusement, and its escape from the isolation and never-ending work of farm life. The supply of country labour is still plentiful: "two or three as many more ready at hand in the country regions of the State," it was estimated in 1921. (*N.C. Club Year Book*, 1920–1921.) This plentiful supply is exceptionally fitted for textile factory work.

"Many of these mountain women have for generations been spinning and weaving cotton in the way of bedspreads [1] and other things, and in some cases dyeing them with home-made dyes which apparently never fade. Some of the bedspreads show an unusual degree of skill in design and production, and many of the dyed spreads indicate remarkable ability in combining colours and in producing at home these fine dyes. Nearly all of these spreads bear some name and the same patterns have been made for generation after generation. The people who are to-day making them do not know the origin of the names, but it is known that they can be traced back to England." (*The South's Development*, p. 336.) The last stage of the spreads is the back of a Ford car, where they envelop the bulging volume of tobacco on its way to the auction-rooms.

Nearly all cotton factory work is individualistic and comparatively isolated. By contrast, the coloured workers in the stemming-room of a tobacco plant enjoy, shoulder to shoulder, the group life of the old plantation. Laughter and jest roll along the work-tables, and now and then from the most religiously minded section of the American continent a hymn such as "Rock of Ages" rises cheerfully above the hum of machinery. In places where white and coloured are together the white man enjoys a variety of supervision, with an eye now on his machinery now on his help and now on the pace of the room's output.

This labour is cheap, perhaps nearly half as cheap as

[1] The Doukhobor women in B.C., Canada, make by hand coloured bedspreads and beautiful wool rugs.

Northern labour, but it is not the kind of cheapness which is costly to the employer. For white and coloured supply, the one, skill and pace, the other, muscle and contentment. Detailed wage statistics are lacking. The reports of the N.C. Department of Labour give only the wage range between the highest and lowest paid, male and female. It is a subject on which the casual stranger cannot easily obtain full information, but the following series is compiled from individual examples, which are believed to be representative. All through the State the normal working day seems to be ten hours, with a half-day on Saturday. Daily wages are given.

(1) Building Trades.

Within this group occur the few occupations which have escaped the *dégringolade* of manual skill.

Greensboro' bricklayers, \$8; plasterers, \$8·75.

Mount Airy Granite Quarry: cutters, \$8 (head cutter, who instructs the apprentices, \$10 to \$15).

Some of the latter were Scotchmen or Cornishmen who had made the familiar trek; first the Scotch village or small English town: then the winter-cold North, Maine, Vermont, Ontario, and now N.C., where in the first week of January outside work is comfortable and exhilarating. To this group may be added the process of upholstering in the furniture factory.

High Point, N.C.: upholsterers, \$10 to \$12·50.

Upholstering involves a number of difficult hand processes—fitting the springs; stuffing; stretching and tacking down the upholstering material.

The writer watched an Old Country craftsman upholstering a "non-standard" suite with a tapestry imported from England; for High Point sells also to millionaires.

(2) Cotton and Hosiery Mills, Greensboro' and Durham.

Cotton: men, \$5.73 to \$2.32; women, \$4.88 to \$1.50.

Hosiery: men, \$5.00 to \$1.66; women, \$3.33 to \$1.33.

Workers on piece rates, especially in the hosiery mills, will sometimes exceed these maxima.

(3) Tobacco Factory, Winston-Salem.

Men, \$7.00 to \$2.00; women, \$4.00 to \$1.50.

Here, as in (2) and (4), the lower figure may be assumed to be for coloured labour or beginners. In a tobacco stemming-room of a plant belonging to the Imperial Tobacco Company the coloured workers were making 18 c. an hour at the rate of 6 c. per lb. of stem removed.

(4) Furniture Factory, Winston-Salem.

Men, \$5.00 to \$2.00.

The great mass of furniture is of standard suites; for the industry presents the acme of standardisation both of process and of pattern. The suites pour forth by hundreds a week; and after a halt in the hands of the retailer, which adds at least 100 per cent. to their price, pass into standard homes. If the town is building a big hotel by community subscription, the 500 or more identical suites will pass at wholesale rates into 500 or more identical bedrooms, of which three-fourths will be "with" and one-fourth "without" (*sc.* in England a bath).

(5) Machinists and auto-mechanics.

Men, \$5.00 to \$6.00.

The drivers of Jitney Services ("careful driving, easy riding") are said to command a wage of \$150 a month. They drive the whole day long, but how a high-powered car, in winter at any rate, three-fourths empty, and charging considerably less than the railway for a ride of equal distance, can afford such a scale of pay it is difficult to understand.

There are no big towns in N.C. Winston-Salem, the largest, had a population in 1920 of 48,000 (estimated in 1924 at 65,000). Most of the cotton mills are in small towns or factory villages; and in the latter the cottages are generally owned by the employer. The workers pay 50 c. per room per week, with lighting free and often a small garden where food-stuffs can be grown. When there is no work, no rent is charged. The big firms supervise the boarding of their female help, the charge being, say, \$5 per week per girl with board. Though the prospect of home ownership is as 3 to 1, and in some mill villages nil, the workers have great latitude in their abode. For, if they live at a distance, the few who lack a car come down to the factory in machines belonging to fellow-workers, who pay for them by operating thus an informal jitney service. In Winston-Salem some of the negro shacks and shops are very dirty and mean. This is disconcerting when it is remembered that the net profits of the largest tobacco company in Winston-Salem rose from \$3 millions in 1914 to \$23 millions in 1923. In N.C. there is no law of compensation for industrial injuries. It is one of six States lacking such a law.

In N.C. the maximum hours of work for children are eight. Thirty-three States have a shorter working day for children.

In N.C. there are no labour unions.

The Manufacturers' Record correctly appraises the value of all this from the employers' point of view, when it says:

> "Many of the greatest cotton mills of New England which long held a dominion in this industry are moving to the South and others will soon follow. These people are moving South to escape the conditions which prevail of high taxes and labour legislation in New England. They have no desire to carry their New England labour South, but, on the contrary, they are moving South to escape New England labour conditions." (*The South's Development*, p. 337.)

In the interest of the welfare of women and children a counter-pressure is needed. The larger employers treat their workers very well; but they should remember that they have the unique privilege of setting to work a store of accumulated rural energy still new to the cash-wage stimulus. One counter-pressure is the labour union, with its inevitable accompaniment of strikes, which damage the worker as well as the employer. Moreover, where white and coloured work in the same community, class warfare places white workers in an ambiguous racial relationship and might create among coloured workers a mass unrest, which would destroy the satisfactory balance which now exists between black and white. There remains as an alternative to the labour union the public schools and all that they will accomplish when teachers are properly paid. And in America, when the community is behind the schools, no power can resist them, and no big men would long desire. With the schools lies the conservation of the present generation of country-bred men and women; and on the schools will fall the cultivation of that next generation to whom country life will be but the memory of a home farm whither their parents for a time repaired when factory work was slack.

C. R. FAY

A RETROSPECT OF FREE-TRADE DOCTRINE[1]

In his address as President of Section F of the British Association in 1907, Sir W. Ashley gave a rather gloomy survey of the position of economics. He argued that the position of the classical economists had been undermined till little remained standing, while no new synthesis had as yet appeared. In his Presidential Address at Toronto in 1924, published in the ECONOMIC JOURNAL for December, the view taken of the classical economists is the same, this time with special reference to the free-trade argument. He crystallises the argument of the free-trade economists during the century that followed the publication of *The Wealth of Nations* into nine propositions, and argues that these propositions are now discredited or untenable.

Now I am far from denying that this argument may be a very good *argumentum ad hominem* to some people. J. S. Mill wrote,[2] "The English public are quite as raw and undiscerning on subjects of political economy since the nation has been converted to free-trade, as they were before." That conversion was due not to transcendent economic wisdom but to a happy accident (if the threat of famine can be called a happy accident), and the free trade of many free-traders seems rather a happy accident or a happy instinct than part of a logical system. Such free-traders at least may be challenged to produce new arguments, since they have palpably discarded the old, and to such free-traders Sir W. Ashley's challenge is perfectly fair, both in intention and, if I may say so and as far as I can judge, in execution. I, on the other hand, think that a voice may still be raised on behalf of the old free-trade doctrine.

I agree with Sir W. Ashley that Adam Smith's Method is fundamentally "deductive" in spite of the wealth of historical information he gives. In this I hold he was right, for the reasons shown by Mill in his Logic of the Moral Sciences.[3] If the object of economics, as of other sciences, be to give us the laws of the phenomena, then I believe it to be a perfect dream that history

[1] A comment on Sir William Ashley's Address under this title published in the ECONOMIC JOURNAL, December 1924.

[2] *Autobiography*, p. 238.

[3] *Logic*, Bk. VI., ch. vii.

alone can do this, and in this I am confirmed by Sir W. Ashley himself, who, in his former Presidential Address, seemed to show that, so far at any rate, history had established no general laws.

The first two propositions of the free-trade doctrine are that Nature is beneficent, and that Nature consists in the unrestricted freedom of every individual to pursue his personal desires and interest in his own way. Now in what sense did Adam Smith and his followers regard Nature and the unimpeded action of men in society as beneficent? First of all, they all recognised the duty of the State to put down force and fraud. This is the irreducible minimum of State action. Of course they admitted other exceptions to the rule of liberty. But if even only force and fraud are excluded, a good deal follows. It follows that the economic man can acquire wealth only by offering an equivalent. The whole economic life is envisaged as a voluntary interchange of goods and services. Now, had Smith and his followers simply assumed that such an interchange must always and everywhere work for good in the supplying of human wants, would it have been a very daring assumption? In many ways we can see at once that it is so. Under freedom labour and capital will tend to supply the most urgent wants. Demand and supply will tend to equal one another. But I do not think it is true that the optimism of Smith and his followers was simply an unproved assumption. It is rather the conclusion to which their study of the phenomena leads them. It is quite possible that Smith carried into *The Wealth of Nations* from *The Theory of Moral Sentiments* some of the indiscriminate worship of Nature and the Law of Nature which characterised the eighteenth century. This is an interesting point in the history of opinion, but it is irrelevant for our purpose. Smith's optimism must be criticised on its merits, and according as he has succeeded or not in *The Wealth of Nations* in showing that it is a correct deduction from the facts taken as a whole. It is possible to reject as a mere superstition the general doctrine that whatever is is right, and that everything is for the best in the best of all possible worlds, and yet to believe that in the particular sphere of the voluntary interchange of goods and services the self-interest of each tends to promote the interest of all.

It must be remembered that Smith's is only one of several possible optimisms. If economic determinations are not to be left to the self-interest of the individual man, if, for instance, I am not to be at liberty to buy from the foreigner when I can do so cheaper than at home, then economic determinations must be

made by the State or other outside authority. From this point of view the question is not so much whether unfettered self-interest is likely always to work well, but whether or in what cases external authority is likely to work better.

Take, for instance, what may be called the optimism of no-sanction. A great deal of current opinion looks for peace and contentment, in both international and industrial matters, solely to a spirit of concession and conciliation. Far be it from me to discourage such a spirit, but it demands a tremendous exercise of faith to expect that everything is to be settled by a voluntary abnegation of self-interest to an indefinite extent and often one-sided.

Or take collective bargaining. It may seem great "optimism" to suppose that individual bargaining and the competition of employers will give a fair wage or the highest wage, but is it not "optimism" to assume that the two organised bodies of masters and men will always agree on a just wage, failure to agree being necessarily followed by total cessation of the service?

Then if self-determination is to be replaced by State determination, what of the competence of the State? The modern democratic State consists of just the same men whose actions are to be controlled. What reason is there to suppose that the same man in the ballot box is any wiser or less blinded by self-interest than in buying or selling, employing or being employed? The only difference is that self-interest, which is normal and almost necessary in private life, is altogether inadmissible in the discharge of the elector's trust. But, though inadmissible, sectional self-interest is, as we all know, asserted and appealed to in all elections and by all parties. Of any national determination we can only say that it is the expression of the opinion of its interest held by the majority. The opinion of the minority, however large, may have been absolutely disregarded. Of nothing is this more true than of tariffs. I appeal to your readers whether the whole history of tariffs in all countries does not show that they represent far more the result of a conflict of interests than an impartial attempt to arrive at a policy in the interest of all.

If it be said that the picture of modern politics as predominantly selfish is at least an exaggeration and that the State does stand for some ideal of reason and justice over and above the clash of interests, I don't dissent. But I claim the benefit of a similar admission on behalf of the classical economists. Our churches, universities and hospitals are the voluntary creation of the economic man no less than our railroads and ships. What

the classical economists lay down is not that men are necessarily and always selfish, but that a system which should rely on unselfishness would be precarious, that it is not safe to rely on people acting contrary to their interest, that self-interest, acting within the limits of justice and honesty which they postulate, acts fairly well on the whole, in the way they show, and in any case better than the arbitrary fiat of the State.

Another of the propositions of the free-trade doctrine is thus enunciated: "That every country has certain natural advantages. Left to themselves individuals will exert themselves in the directions to which these advantages point. It is, therefore, for the benefit of a country or nation that they should be left free to do so."

Sir W. Ashley's criticism of this is, firstly, "that the greater cheapness with which one country can produce goods as compared with another is obviously in some cases due to no peculiar advantage in the geographical sense, but simply to the historical fact that the manufacture was established there earlier." And again, "That one policy is clearly more advantageous in the short run does not prove that it must be more advantageous in the long run." Why is the private capitalist supposed to be indifferent to what is "advantageous in the long run"? It is at least not obvious why private enterprise is unequal to starting a new industry without a tariff, when the only obstacle is the initial expense. Dealing in reversions on lives or on long leases, sinking pits or planting rubber are instances of the willingness of private enterprise to adventure for a postponed profit.

Secondly, Sir W. Ashley suggests that free trade is or may be in some way connected with "low-grade" labour. He mentions American slavery in this connection. If this means, as the argument seems to require, that free trade causes labour to be "low grade" which would otherwise be "high grade," I cannot see that he furnishes a scintilla of argument to that effect. I do not assume as proved that free trade increases total wealth, but if it be true, then it is at least probable that the standard of every class is raised. If not, the increased total wealth affords a fund for compensating or relieving any class prejudicially affected. I am not suggesting that any such compensation or relief is expedient or practicable, but obviously greater total wealth makes it more possible.[1]

Another of the free-trade propositions is described as the "quite insufficient estimate of the extent to which newly accumu-

[1] See Fawcett, *Free Trade and Protection*, p. 9 (4th ed.).

lated capital is transferable as between one country and another." Undoubtedly the international transfer of capital could not bulk so largely in our fathers' eyes as in ours. I have always thought it to some extent affects Mill's argument that the motive to international trade is not the absolute advantage that one country has over another for the production of a particular article, but the differential advantage when the relative costs of production of two different articles in two countries are compared, so that even although one country may have an absolute advantage in both, it will pay it to import the article in which it has the lesser advantage, that is, to buy it where it is produced as at a greater cost than at home.[1] The practical importance of Mill's argument is diminished by the consideration that now new capital is likely to flow to the country with the lower cost of production.

I approach the question, then, with a lively consciousness of the possibility, the actuality and the significance of the international mobility of capital. How does Sir W. Ashley approach it? The only instance of and motive to the investment of capital in a foreign country that he seems to contemplate are what takes place when a manufacturer erects works in a foreign country to get the advantage of its tariff. The converse case is when a tariff causes the savings of the country, which might otherwise have gone abroad, to be employed in erecting works at home to get the advantage of the tariff. Examples are given in connection with the Patent Act of 1907, the Dyestuffs (Import Regulation) Act and the McKenna Duties, and we are reminded that "English manufacturers have not been deterred from yielding to the pressure of foreign tariffs and establishing works abroad by any personal views of their own as to free trade or protection."

Now no one need hesitate to admit the fact. It is true, indeed, as Sir W. Ashley admits, that the export of capital is not an unmixed loss, or perhaps on the whole a loss at all, to the exporting country. It is also true that even the immediate effect of a tariff on the protected industry is often less than expected. Industries threatened by foreign competition often show surprising vitality without protection. Protected industries often languish in spite of a tariff. This, probably, as much as selfishness, is the reason of the well-known fact that infant industries, nurtured on a tariff, never grow up. Still there is no reason why anyone should deny that Governments by tariffs can to some extent cause a protected industry to flourish and expand, and thereby attract capital to the industry, either from their own citizens or from abroad. But

[1] *Political Economy*, Bk. III., ch. xviii.

surely the question is what policy will attract most capital *on the whole.* And surely the answer must be, that policy which brings the greatest profit *on the whole.* If the free trader is right in believing that the advantage to the protected industry is more than offset by the loss to the unprotected industries, then the capital attracted to the protected industry will be more than offset by the capital repelled from the unprotected industries. I am not assuming that it is so. I am merely pointing out that the argument seems to confound cause and consequence. Instead of arguing that protection is the more profitable policy *because* it attracts capital, what is required is to show that protection is the more profitable policy on the whole. If that is shown, we shall have no difficulty in admitting that as a consequence capital will be attracted to the protectionist country.

On the other hand, Sir W. Ashley says that the free-trade economists exaggerated the ease with which capital and labour can be transferred from one occupation to another within the country.

The difficulty, great or small, partly arises from trade unionism, as Sir W. Ashley admits. He says, " To say that certain trade unions do in effect impose obstacles to entry upon a trade is not necessarily to condemn them." Certainly it is not " necessarily to condemn them." It may be justified by some higher good. But at least it is in itself an evil, and if Sir W. Ashley's attitude means that all trade union practices are to be simply accepted as final, then it is a far less defensible " optimism " than any in Adam Smith. It is bringing no railing accusation against trade unions to suggest that their ideas and practices need the critical microscope at least as much as those of the free-trade economists.[1]

For the need of transferring labour and capital on occasion from one to another industry is not created by free trade. The one certain prophecy we can make about the industry of any country fifty or a hundred years hence is that, free trade or no free trade, its distribution will be very different from what it is to-day. Further, I suggest that tariffs are as little likely to stabilise as to augment industry. A tariff no doubt might be nicely adjusted to preserve an industry threatened by foreign competition exactly on its present scale. But those who defend tariffs at all do not confine them to that purpose, and, indeed, if tariffs can effect so much, why should they? If a tariff be used to extend or create an industry, then the effect is to cause a transference of labour and

[1] In the *Edinburgh Review* for July 1913, the present writer essayed the rôle of critic.

capital. Sir W. Ashley may not believe with McCulloch that the workman displaced in one industry must necessarily and immediately find a job waiting for him in another, but I presume he believes in some sort of equivalence or, let us say, proportion between imports and exports. If so, then protection must involve some injury to export trade. Obviously it is so. It is scarcely possible to conceive a protected article that shall not affect export trade. Merely raising the cost of living affects our capacity to export. Protection then, as well as free trade, or more than free trade, may cause the "demoralisation" and other evils attendant on a change in industry.

The possibility of changing over from one industry to another is seen nowhere better than in the industrial history of Glasgow, where I write. Glasgow's first great trade was the Virginia tobacco trade. That was stopped dead by the war of 1775. Glasgow then turned to West Indian sugar, and the year 1775 (one year before the publication of *The Wealth of Nations*) exactly coincided with the beginning of a quarter century of marvellous growth.[1] That was, no doubt, a commercial rather than an industrial change. Industrially Glasgow and the neighbourhood bade fair to be the centre of the textile industry, but have mainly lost that and turned to shipbuilding and industries dependent on iron and steel.[2] Now it is safe to say that during the whole period of the change only an infinitesimal part of the population has been unemployed. And one reason is obvious. If we suppose the average working life of the workman to be forty years, then a trade may contract $2\frac{1}{2}$ per cent. a year without a single man losing his job. Of course I admit that a trade may decay at a more rapid rate than this, free trade or no free trade.

The best proof how mobile labour may be in the absence of artificial restraints is furnished by what happened in the war. That lesson is surely far less disputable than the "success" with which Sir W. Ashley says "the State in all countries undertook during the Great War novel functions." That "success," such as it was, could not have existed if it had not been for the thousands of quite untrained persons, male and female, who, in the shortest possible time, tackled, with zeal and efficiency, every kind of unaccustomed job, from fighting to making shells.

A. A. MITCHELL

[1] See Introduction to *One Hundred Glasgow Men*: James MacLehose and Sons, 1886—reproduced in *Old Glasgow Essays* by J. O. Mitchell: James MacLehose and Sons, 1905, p. 376.

[2] *Old Glasgow Essays*, p. 32. "The English and Scottish Cotton Industries" by Miss G. M. Mitchell in the *Scottish Historical Review* for January 1925.

THE VALUATION THEORY OF EXCHANGE

I

SINCE the breakdown of the old classical system it has been the chief complaint against political economists that they do not offer uniform principles. Instead of "Les Harmonies Economiques" we have to face "Les disharmonies des Economistes." But it is not generally understood, not even within the science itself, how narrow and limited the battlefield of the antagonistic theories really is. Economists do not often hold different views about economic facts, but they try to explain them in different systems of description.

In post-war literature, however, some new controversies have arisen even in those parts of economics where the pre-war literature could boast of unanimously accepted "truths." The most remarkable example is the theory of Foreign Exchange. Up to 1914 nearly everyone believed that the explanation of the variations in the rates of exchange was to be found in the balance of payments. At present, perhaps, the majority of scientific authors on the subject must be classified as adherents to another theory, namely Cassel's doctrine of the purchasing power parity, while some economists and most business men still cling to the old faith. The purpose of this article is, however, to show that the two rival theories are not in contradiction, but that they complete each other. They are indeed interdependent. They only emphasise different links in the same nexus of causality. They both form parts of a more general description of the matter, which may properly be called the valuation theory of exchange.

II

The classical statement of the theory of purchasing power parity is, in my judgment, given by Professor Cassel in his memorandum to the International Financial Conference of Brussels in 1920. The brief sentences of that report contain the whole thing in a nutshell. It will, therefore, as the base for a closer examination of the doctrine, be useful to sum up as follows the contents of that statement :—

Our willingness to pay a certain price for a foreign money

must ultimately and essentially depend on the fact that this money has a purchasing power, as against commodities and services in the foreign country. On the other hand, when we offer so and so much for our own money, we offer in fact a purchasing power against commodities and services in our own country. Our valuation of a foreign money will, therefore, essentially depend on the relative purchasing power of the currencies of both countries. When two currencies have been inflated, the new normal rate of exchange will be equal to the old rate multiplied by the quotient between the degrees of inflation of both countries. The rate calculated in this way must be regarded as the new parity between the currencies and the true equilibrium of the exchanges.

When international trade is unimpeded, the actual rates of exchanges will coincide fairly well with this *purchasing power parity*. But the exchanges may be distorted from this parity by several factors, such as prohibition of export or import, systems of licenses and rationing, a differential price policy, distrust in the future of a monetary standard and operations of speculators. There are many instances of such abnormal deviations of the exchange.

When the exchanges move against a country, people generally explain it as a result of an adverse balance of trade. But this explanation is obviously inadequate if the deviation of the exchanges is considerable, and has more than a quite temporary character. For if any country buys more from another than it sells to it, the balance must be paid in some way; say, by export of securities or by loans in the other country. Thus the balance of payments must on the whole equalise itself, and gives no reason for a definite alteration in the rates of exchange. Should such an alteration occur, it must generally be taken as a proof of an inflation which has brought down the internal value of the monetary unit of the country and raised its general level of prices. With an unaltered price level and an adverse rate of exchange, the country's export trade should get a strong stimulus which would tend to bring the exchange back soon enough to its normal rate. The acceptance of this reasoning will mean that we are bound to abandon altogether the popular theory of trade balances as an explanation of the movements of international exchanges.

It will be found that the description given in this theory contains the following four chief statements :

1. We buy foreign money because it can procure foreign commodities and services, *i.e.* because of its purchasing power.

2. Through international trade the rates of exchange will be

equalised in accordance with the purchasing power parities, though abnormal deviations may occur, caused by restrictions in trade, distrust or speculation.

3. Those parities are determined by the money policy of the countries in question.

4. The balance of payments is always balanced, *i.e.* it equalises itself, and cannot result in any durable distortion of the rates of exchange.

It will be convenient for our purpose to examine each of these four statements.

III

Cassel's *first proposition* is contained in the sentence that "our willingness to pay a certain price for a foreign money" depends on "the fact that this money has a purchasing power as against commodities and services in the foreign country," and that "our valuation will, therefore, essentially depend on the relative purchasing power of the currencies of both countries."

Cassel takes this for granted. He seems to find it self-evident. He gives the assertion as a postulate without any effort to explain it or to analyse it. He is, however, able to maintain the sentence only because he attributes that willingness to pay to a vague totality of all buyers of foreign money characterised pronominally only. He speaks about "our" willingness. There is, however, no impersonal "we" who are willing to buy foreign money. It is a great multitude of men and women with different purposes and different motives. We may consider three groups as typical. In order to avoid an introduction of new technical terms, we may simply call them *importers*, *investors* and *debtors*. Let us try to find out whether Cassel's postulate holds good for any of them.

1. *Importers* pay, true enough, for foreign money because it has a purchasing power. But what they take into consideration is not "essentially" their knowledge of the existing purchasing power at the moment when they have to decide whether to buy or not, but their valuation of the comparative purchasing power of the currencies against wanted articles at the moment when they must pay for them. They will form an opinion about the probable future movements both in the rates of exchange and in the prices of the commodities required. It is, thus, the calculated future purchasing power parity in relation to certain commodities and services that will count for them. In a fluctuating market almost every importer is thus an involuntary speculator.

2. *Investors* are willing to pay for foreign money, not because

it has a purchasing power "as against commodities and services," but because it has a purchasing power against stock.

Cassel has tried to verify his theory by comparing the alterations in the rates of exchange with the variations in the purchasing power parities as measured by wholesale indexes. But as the group of investors form a part of the totality of exchange buyers, this verification is of doubtful worth. To the investor the purchasing power against commodities is wholly irrelevant. He judges from quite another point of view. He has to take into consideration what profits are made in the foreign country, what taxes are paid there, and what will be his probable risk if he takes his money abroad. Discount and confidence enter into his normal motives.

3. *Debtors* are willing to pay for foreign money because they are obliged to buy it. Commonly, their liabilities will have to be covered through the payment of a certain sum at a certain date in the legal tender of the creditor's country. Before the day appointed, they will have the choice, but if they have not succeeded in procuring the necessary money at an earlier date, they must buy *à tout prix*. In any case, their decision will be independent of the actual purchasing power of the foreign money.

This analysis will show that the demand of three important groups of buyers is not included in the suppositions of Cassel's theory—the speculators in the forward market, the capitalists investing abroad and the debtors bound to pay in foreign money. This omission is most peculiar. Cassel's theory has been put forth as a typical post-war idea. Its chief justification should be its fitness to explain the movements in the foreign exchange after 1914. But never has there been so great a speculation in the forward market, never has there been such a perfect mobility in the international circulation of capital, never have such hopelessly great foreign debts been owing as in just these years.

Thus, Cassel's theory has been unable to throw any light upon the two most remarkable economic movements influencing the exchange market since the beginning of 1923: the European "flight of capital" in the period from the Ruhr invasion to the acceptance of the Dawes plan and the east-going stream of capital in the second half-year of 1924.

Also the exchange problems raised by the Reparation payments lie outside the era of phenomena explicable by Cassel's doctrine. We see, therefore, that the author of the Dawes report does not base the scheme for the maintenance of the new German money upon any measures intended to influence the purchasing power

of the re-introduced Gold mark. The purpose of his system is, through the establishment of the Transfer Committee as an intermediary mechanism for stabilisation, to secure that a German demand *à tout prix* for foreign money to cover the reparation liabilities should not destroy the balance between Germany's earnings from abroad and the payments she must make abroad.

This discussion will have been sufficient to reveal two chief weaknesses of the post-war conception.

First, Cassel's doctrine is wholly a commodity theory. It does not take into account that there is not only an international market for wholesale articles, but for capital also. Professor Cassel should, therefore, avoid speaking contemptuously about "the popular theory of trade balances." That popular theory and his own scientific doctrine have faults in common. Mr. Hawtrey, who has tried to define money as the means established by law or custom for the payment of debts, points out that the buyer who has to pay debts abroad instigates a most important part of the demand on the market for foreign money. For only when money is used to fulfil one-sided payments, does it carry out its specific function; only then it is more than a simple intermediary in barter. All the arguments which Mr. Hawtrey puts forth against the theory of the trade balance may be used against Cassel's doctrine as well. It would, therefore, not be unjust to rebaptise the latter theory, calling it by the somewhat elliptical but most fitting name *the doctrine of the commodity parity*.

Secondly, Cassel's theory belongs to the statics of science. It is based upon the supposition that there has been once upon a time a perfect equilibrium between the purchasing powers of the different currencies. It is judging all movements in the exchanges in relation to that presupposed equilibrium. It is, therefore, open to all the objections that may be raised against any wholly static description of the dynamic world of economic reality.

IV

Cassel's *second proposition* contains the assertion that international trade will be a sufficient means to effect an exact equalisation of the rates of exchange provided that "abnormal" conditions do not exercise disturbing influences. As Mr. Keynes has pointed out in his "Monetary Reform," this statement cannot be accepted without an important modification because allowance must be made for transport charges and for import and export taxes. But still greater difficulties in the practical application of the theory arise from the fact that the doctrine in itself does not give

any indication as to the theoretical treatment of those goods and services which do not enter into international trade at all. Mr. Keynes very correctly observes that a complete equalisation could only be effected through trade if in the long run the home prices of the goods and services, which do not enter into international trade, moved in the same direction and proportion as those which do. Thus the theory requires an assumption for its validity, which must be considered as very doubtful, for " one can only say that it is more or less true according to circumstances."

In the *third proposition* the determination of the purchasing power in any country is ascribed to its monetary policy only. We have here to deal with a deduction from the quantity theory of money in its specific form which claims an exact inverse proportionality between the quantity of money and the purchasing power. It will, however, be very difficult to maintain this doctrine of exact proportionality after the experiences during the inflation in Germany. We may perhaps sum up the lesson of events in Germany by saying that a small augmentation in the quantity of money tended to diminish the velocity of circulation, while greater additions to the circulating currency accelerated it. Mr. Keynes in his " Monetary Reform " has made a similar statement. If we introduce the subsequent modifications in the theory, these modifications must be taken into account also by the deduction of Cassel. But even if we abstract from all objections against the money side of the quantity theory, the whole reasoning seems to be of doubtful worth. I shall endeavour to explain why.

The base of the quantity theory is to be found in the equation of money circulation expressed in its classical form by Irving Fisher in the following way :

$$MV + M'V' = \Sigma pQ = PT.$$

Here M is the quantity of money and V its velocity of circulation, while M′ is the quantity of circulating credit, and V′ the velocity of circulation of the credit in question. ΣpQ is the algebraic symbol for the value of the totality of all individual purchases— p, $p1$, $p2$ . . . pn being the prices, and Q, Q1, Q2 . . . Qn the quantities sold. P is the level of prices and T the volume of trade.

In this equation the expression ΣpQ is found simply by adding together the products of price per quantity and the number of quantities sold for all individual purchases within the community during the period of observation. Now, it must be noticed that

those individual prices and those individual numbers of quantities sold are not uninfluenced by alterations in the rates of exchange. This is a matter of daily experience. But it may also be deduced from the general theory about the interdependence between prices, supply and demand. For according to that theory the effect of a rise in the rates of exchange will be that decreasing quantities are sold at increasing prices if forward calculations do not disturb the valuations of the business men concerned. From this it follows that in the expression PT the two magnitudes may vary inversely without necessarily affecting any of the items on the money side of the equation, a conclusion which will lead also to a new modification in the formulation of the quantity theory itself. During a period in which the rates of exchange are rising, while the quantity of money and the circulating credit are kept constant, and the velocities of circulation remain unaltered, it may, therefore, happen that the average price level increases when the quantity of commodities sold decreases accordingly. But it is the average price level as symbolised in the magnitude of P that gives the basis for Cassel's calculation of the purchasing power parities, and it is those P's which he has characterised as being wholly determined through the money policy. This analysis will, however, show that Cassel's proposition has no general validity, and that the causal relation between the purchasing power parities and the rates of exchange may be reciprocal. The reasoning will be quite similar, and the result conformable if we use the formulation of the quantity theory put forward by Marshall, Pigou and Keynes.

What here has been proved to be theoretically possible, has happened in Norway in the period from June 1923 up to October 1924: by an unaltered quantity of money the foreign exchanges moved upwards, dragging the purchasing power parities slowly after them.

V

Cassel's *fourth proposition* is meant to be a deadly blow against the pre-war theory. It contains the assertion that the balance of payments will always equalise itself, and, therefore, never can result in any durable distortion in the rates of exchange.

On this argument two remarks can be made:

Firstly, the pre-war theory was also fully aware that the balance of payments contains a self-equalising tendency. The whole system of gold redemption assigned in fact to gold only the function of being the means of regulation, to which resort was

had until the self-equalising tendency of the balance of payments had made itself effective. The gold was nothing else in the interval between the Napoleonic wars and 1914. Many countries had not gold enough to pay off the whole deficit of a single bad year. The payment was effected then, as now, just in the way mentioned by Cassel, through sale of securities and foreign loans. But when the pre-war theorists gave warning against recurrent deficits in the balance of payments, it was just because they knew that the equalising would have to be effected in that way. When they termed high rates of exchange "unfavourable," they did not do it because they considered a high level of exchanges as being unfavourable in itself, but because they took it as a symptom of an economic process that tended to make the country more indebted and thus more dependent on foreign nations. The balance of payments was considered as covering the totality of causes determining transient deviations from the gold parities, just in the same way as Cassel describes distrust and restrictions in trade as causes of corresponding deviations from the purchasing power parity. It was, on the whole, the chief idea of the pre-war theory that the level of the rates of exchange had its real significance as a symptomatic phenomenon. This principle may claim full validity for the post-war period also. Nay, the symptomatic importance of the rates of exchange is now still greater than before, the only difference being this, that high rates of exchange may now be taken as symptoms of inflation also.

Secondly, it should be remarked that Cassel himself must resort to the balance of payments. For how can the purchasing power parities affect the rates of exchange? Solely through the knowledge of importers and exporters and their subsequent transactions on the exchange market. But the values of import and export form parts of the balance of payments. Thus any alteration in the rates of exchange brought about by the purchasing power parities is effected through the medium of the balance of payments.

On the other hand, Cassel is right when maintaining that the pre-war theory in itself is unable to give a general solution of the exchange problems. This will, it is to be hoped, become clear from our concluding chapter, which will try to draw up the outlines of a positive theory.

VI

The rates of exchange are simply the prices of foreign money. Systematically their treatment belongs, therefore, to the theory

of prices. All the general doctrine about the determination of prices is applicable to them. What remains to be explained in the theory of exchange is accordingly only what is special for this particular determination of prices.

In the general theory of prices the last links in the price-determining nexus of causality are commonly called demand and supply. On the exchange market, however, where the articles changed against each other are all currencies, it would perhaps be more convenient to say with Henry Sidgwick that the proximate causes of the determination of the rates of exchange are to be found in a reciprocal demand.

In a treatise on the theory of valuation which I recently published in German [1] I have drawn attention to the fact that human resolves provide important links in the determination of all economic events. Thus, the reciprocal demand in the exchange market can be considered as the result of a great number of human resolves to buy foreign money. Now, a human resolve is more or less free. Only in few cases can an individual decide wholly voluntarily. Perhaps the greatest number of his resolves are for the accomplishment of what has previously been decided upon. The resolves to buy foreign money do not form any exception from this general rule. The reciprocal demand on the exchange market can be divided into two chief groups according to its origin from forced or voluntary buyers.

The *forced demand* will principally be carried out from the debtors bound to pay in foreign money. Their number is always increasing, as the web of international liabilities every year becomes more and more widespread. Not only persons and institutions bound to pay interest, annuities and instalments of foreign loans belong to this group, but also those unhappy States which are obliged to pay reparation tributes or war indemnities. A forced demand is also carried out from importers and investors who have bought commodities or securities abroad on a certain short credit, or at later delivery against cash, and from foreign borrowers who are compelled to take their loans home. In times when the exchanges are fluctuating, bear speculators bound to meet their sales must also be included among the forced demanders. Importers of absolute necessaries are nearly in the same position.

In the general theory of prices we acknowledge the equivalence of supply and demand, or—more exactly expressed—the formal equivalence between the values interchanged. The rule has full

[1] Wilhelm Keilhau: *Die Wertungslehre. Versuch einer exakten Beschreibung der ökonomischen Grundbeziehungen.*—Gustav Fischer (1923).

validity for the exchanges also. But there does not exist any corresponding equivalence between the forced demand for foreign and for national money. We may say that a heavily indebted country will have a negative balance in the forced demand for international means of payments, which must be counterbalanced by a corresponding greater voluntary demand for national money from foreigners. This is a highly important point. The indebted countries whose inhabitants must procure great values in foreign money will naturally have the weaker position in the struggle on the exchange market, and any event tending to diminish the voluntary demand for the national money will immediately influence the rates in an unfavourable direction. If the country nevertheless is able to maintain a gold standard its rates of foreign exchanges will often oscillate round the lower bullion point, and to avoid an exodus of gold it must generally keep comparatively high rates of discount and seek a foreign market for its best securities. If the country has not been able to keep up the gold system, but has resorted to a purely nominal standard, the corresponding effects of the predominance of the forced demand for foreign money will be that the prices of foreign moneys will lie above the purchasing power parities. Sooner or later such country will get what might be called a double price level, the prices of imported commodities and of commodities produced by imported raw materials being higher and the price of domestic articles being lower than the world prices. The national loss will be suffered partly by the labourers earning lower real wages than their comrades in other countries, partly by the business-men who must operate with a smaller margin between profit and discount.

If, however, the economic conditions in a country are tolerably good its rates of foreign exchanges will chiefly be determined not by the forced but by the *voluntary demand*. This will chiefly arise from seven groups of buyers, four of them consisting of natives, three of them of foreigners. The former groups consist of importers buying abroad because they find it profitable, investors placing capital abroad, bull speculators buying foreign money to sell it again, and travellers going abroad. The latter groups are composed of foreign exporters and investors taking their profit home, and foreign borrowers transferring their loans.

The voluntary demanders will only buy when they find it profitable. Their resolutions will be determined by their valuations. But each group of demanders will naturally value foreign money according to their own purposes. We could say that each individual demand is determined by the value-in-use of the foreign

money for the demander. For each such demander there might be constructed a separate parity, existing when the ratio between the exchanges will make it possible for the demander for equivalent exchange values of both currencies to obtain equivalent values-in-use in relation to his particular purposes. Not to diverge too much from the terminology of the current theory, we may use the expression that each individual demander has his own *utility power parity*. That parity, however, will not be determined by the same principles for all groups. To investors it will be a profit parity; as most international investors calculate with a bank interest, we find here the theoretical justification for the use of discount as an instrument in the exchange policy quite apart from its influence on the movements of the gold. To specialised importers it will be a parity between the values of the same commodities in the different countries. To all-round importers it will be a more general purchasing power equality. But it must be remembered that to an importer residing, for instance, in London, prevented from making use of German money in Germany, the parity cannot be defined in relation to the purchasing power of German money in Germany versus the purchasing power of British money in England; for him the value-in-use of German money must be measured through its purchasing power against German commodities bought c.i.f. British harbours. Whether any purchasing power parity calculated through a comparison of wholesale indexes constructed for other purposes may be taken as an approximate average of all individual utility power parities can hardly be decided upon through general principles; it will—to use the expression of Mr. Keynes—" be more or less true according to circumstances."

If both currencies in question are stabilised in relation to gold, all individual valuations take, however, a very simple form. The reason is that gold can be used for paying debts, for buying commodities and for investing capital in any part of the world. It has an international value-in-use. Any demander, therefore, who is buying foreign money redeemable against gold, will be able to confine himself to a calculation of its ratio to the value of gold. In this simplification of the valuations will be found the chief argument for an international system of gold standards. It will be seen from this that, while the gold parities will not necessarily coincide with the purchasing power parities, they may be considered as a special form of utility power parities.

If a currency is not stabilised against gold or another precious metal, it has no utility power outside of the country in which

it is the legal tender. Particularly during processes of inflation the valuations of the demanders, must, therefore, principally take into consideration the money policy of the country in question. Cassel's theory, though unsatisfactory in itself, has no doubt contributed very much to a clearer understanding of this important fact. Its political mission has been greater than its scientific worth.

It will be seen from this analysis that in all cases where the forced demand is not predominant the variations in the rates of exchange must be traced back to the various valuations of the different groups of voluntary demanders. Those valuations will also determine the balance of payments. The chief fault in the pre-war theory was the supposition that the balance of payments in its entirety influenced the exchange market. But only that part of the balance of payments which is transferred into a money other than that in which it was earned will ever be able to affect the exchange. However, how much foreign money earned by a country will be taken home, and how much money earned by foreigners in that country will be taken abroad, will entirely depend on the valuations of the owners, particularly on their calculation of the future market of exchanges. Thus, also, between the balance of payments and the rates of exchanges the causal relation is reciprocal.

A social law must be able not only to explain what has happened, but also to forecast coming events. The criticism in this article will have sufficed to show that neither the pre-war conception of the balance of payments nor Cassel's theory about the purchasing power parities can be considered as adequate for prediction. He who wishes to form an opinion about the future movements in the rates of exchange will have to find out as exactly as possible the volume of the reciprocal forced demand for foreign money, and with all his intuitive power he must try to grasp and understand the valuations of the voluntary demanders.

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NEW MEANS FOR THE MORE RAPID EXTINCTION OF THE BRITISH NATIONAL DEBT

Great Britain is perhaps the only great European nation that has faced the problem of reducing the heavy burden of the National Debt left as a sad heritage by the War. When the War was over she resumed her traditional policy of amortising the debt, which had been suspended during the War. And so the National Debt, which on March 31, 1920, amounted to £7,856,600,000, on March 31, 1924, was reduced to £7,680,400,000. It appears to be reduced by about £176,000,000; but it has been observed that in reality the reduction in the period from 1920 till the present has been more notable, taking due account of the increase of the nominal value of the debt as the effect of the Conversion Loan at 3½ per cent. And the Chancellor of the Exchequer, Mr. Snowden, in his speech in the House of Commons on April 29, 1924, calculated the reduction of the internal debt, from December 1919, at about £400,000,000 sterling, and the reduction of the total debt, external and internal, at more than £650,000,000.

To the reduction of the debt, as is well known, is devoted the national surplus revenue, which amounted in 1920–21 to £230,000,000, in 1921–22 to £45,000,000, in 1922–23 to £101,000,000. in 1923–24 to £48,000,000. It may be pointed out, also, that there is a tendency in English financial policy to devote a diminishing portion of the surplus to the reduction of the debt. In the financial year 1922–23 Mr. Baldwin departed from the rule of devoting the entire surplus revenue to this purpose; as he used 36 of the surplus 101 millions for the reduction of taxes, and only the difference of 65 millions to the reduction of the debt, and also fixed the plan of amortisation for 1923–24 at 45 millions. And it has been pointed out that if the Chancellor of the Exchequer, Mr. Snowden, had accepted fully this figure for amortisation and devoted to it the entire surplus realised, he would not have had anything left to use for the reduction of taxation.

It is maintained by many in England that the dedication of the surplus revenue to the extinction of the National Debt is a financial canon well applied in normal times, but not practicable in times of industrial depression, and that it is applicable in its

entirety when the surplus is from 1 to 15 millions, and not when it passes this limit and reaches 40 or 100. The entire dedication of surplus revenue to the extinction of the debt is opposed in England by the industrial and commercial classes, who maintain that it is a better system to relieve taxation in a liberal and measured way, for the purpose of giving liberty of movement to business undertakings, providing for the payment of the debt by the maintenance of a limited Sinking Fund, which is all that can be asked from the nation in so difficult a time as the present.

It is maintained by many, on the other hand, that the Sinking Fund system constitutes under present conditions a remedy quite inadequate to the evil represented by the enormous burden of the public debt. On a National Debt of the present dimensions, it is observed, a small Sinking Fund exercises practically no effect, while a large Sinking Fund would necessarily require a large increase in the yearly taxation. And besides, even a relatively large Sinking Fund would effect a comparatively small relief in the burden of the next twenty years. To reduce the interest by five millions a year it would be necessary to institute a Sinking Fund of a hundred millions a year, which would result in an increase, for example, on income tax of from five shillings to seven shillings in the pound, without any immediate prospect of bringing it back to the present level.[1]

Many, therefore, in England have demanded as a much more effectual means of reducing, if not extinguishing, the war debt, a *levy on capital.* The capital levy was, it may be said, the electoral platform of the Labour Party in the General Election in November 1922, and in the following one, which brought this party into power.

The Labour Party advocated the capital levy for the purpose of paying rapidly, by a special effort adequate to the present critical circumstances, a large proportion of the war debt, so as to permit of a permanent reduction of annual taxation and a permanent raising of the level of means of living.[2] But the capital levy has encountered strong opposition in England, and the Labour Party, during the time it was in power, could not carry out their new scheme of taxation, which was an essential part of their programme, as they had not sufficient Parliamentary strength. So they confined themselves to the appointment of a Commission of Inquiry, formed by thirteen competent members, to ascertain the state of the public debt and the incidence of the taxation.

[1] Cf. H. Dalton, *The Capital Levy Explained,* p. 16, London, 1923.
[2] *Ibid.*

This commission was to fulfil the task of making the inquiries necessary for the preparation of the new means proposed for the extinction of the war debt.

In the meantime, while awaiting the result of the labours of this Commission, there is still continued in England the ordinary system of devoting a part of the surplus revenue to the amortisation of the debt—a system, to tell the truth, the efficacy of which must be admitted to be very limited. The amortisation of 65 millions, as in the year 1922–23, or 45 millions as fixed for '23–24, affects the reduction of the amount of the debt to the extent of less than 1 per cent., which appears almost nil as regards the reduction of the burden of taxation caused by the debt.

The system of utilising the surplus revenue for the reduction of the debt is therefore, by itself, of little effect, and does not secure regularity in the process of amortisation.[1] On the other hand, it does not seem probable that the proposed *capital levy* will be effected soon, as it meets with strong opposition, perhaps not unfounded, in England. In such circumstances, in order to effect a more rapid reduction of the debt, which is desirable and indeed necessary in order to give freer scope to the national finances, and to reduce the heavy burden of taxes, while giving greater impulse to the public expenditure devoted to the increase of the general well-being, it seems preferable to adopt the system of the Sinking Fund increased by a special and adequate fund—a system which might supplement that of the surplus revenue, which is in itself insufficient and irregular.

Highly suited to reach this object would seem to be the proposal of Rignano, applied to fiscal purposes. This aims at taxing more substantially, in the succession duties, the part of the inheritance which has come to the deceased from another inheritance, than the part resulting from his own labour and economy; employing for the amortisation of the public debt, as Rignano proposes, the product of the larger duty established with regard to the part of the estate of the deceased which has come to him by preceding inheritance.

Rignano's project is known to English readers, as explained to them by himself,[2] and it has been taken up by several competent

[1] In England, from 1829 to 1899, the amortisation of the National Debt was suspended no less than twenty-nine times, and the surplus revenue was devoted to the reduction of taxation. Cf. my article: "Un nouveau principe d'impôt successoral pour amortir les dettes de guerre dans les pays ex-belligérants" (in *Scientia*, July, 1923).

[2] See Rignano, "A Plea for a Greater Economic Democratisation" (in ECONOMIC JOURNAL, September, 1919).

writers, such as Stamp, Clay, and especially Dalton, who has also proposed a modification of it.[1]

It will be well, however, to state briefly the contents and ends of this project.

Rignano thinks that inheritance is the main cause of maintaining the division of society into the two opposite classes of holders of capital and workers without the implements indispensable for their work, and that this is contrary to nature, because, by placing individuals in initial different conditions in the struggle for life, it causes the survival, not of the fittest, but of those who are artificially less inured to conflict. He therefore considers it necessary to limit the rights of property and inheritance in such a way as to leave the production of goods and the accumulation of new capital to private enterprise, and rather increase the stimulus to economy; but, on the other hand, to render possible the gradual passing over, through a continual automatic process, of certain goods and instruments of production, which are more than others adapted to be managed by public bodies, into the property of the State, without the need of recurring to violent revolutionary expropriation or to the system of indemnities.

For this purpose Rignano proposes to use the succession duty, applying the principle of progression on a new basis, that is, according to the *number of transmissions*, by way of succession or donation, which the various portions of the estate have undergone before arriving at the deceased.

Rignano's proposal is that in very case of succession the estate of the deceased should be divided into three parts: that due to the work and savings of the deceased, on which the State should charge the present succession duty; that part which has already been transmitted, on which the State, as co-heir, would charge a duty of 50 per cent.; and finally that part which has been transmitted more than once, on which the State, as co-heir, should charge 100 per cent.

By this system Rignano thinks there would be a greater stimulus to saving than on the present system of succession duty, as the heir would be encouraged to accumulate by the thought that all the sums he saved would go entire to his children (save what is due to the State for the ordinary succession duty), while what he has inherited will be half confiscated by the State if it has been transmitted once, and entirely if more than once. And he thinks that this may lead gradually to the actual nationalisation of

[1] See Stamp, *Wealth and Taxable Capacity*; Clay, *Property and Inheritance*; Dalton, *The Inequality of Income*, *Principles of Public Finance*, and *The Capital Levy Explained*.

capital, in full compatibility with the economic *régime* founded on private property.

Rignano's proposal has been made the subject of numerous criticisms as regards its social aspect, that is, as aiming at the substantial modification of the rights of property. But, on the other hand, even by the severest critics it has been acknowledged to be capable of financial application.

Of this opinion is, for example, in Italy, Gini, who thinks that if the proposed reform be limited to a measure of a financial character, there is no good reason, after the first transmission, to treat in a different manner, according to the number of transmissions, the property taken gratuitously; that is, he thinks that it should be enough to distinguish in the succession duty between the fruits of saving effected by the testator and what he has previously inherited.[1]

Dalton also, like Gini, would like to limit Rignano's scheme to the differentiation between estate formed by the work and the savings of the deceased, and estate inherited by him.[2]

Rignano in part agrees with his critics, as he owns that the complete fulfilment of his proposal presupposes the political preponderance of the proletariat, which has not yet been acquired, and he consequently presents, as capable of immediate application, what he calls a *minimum project*—that is, a project directed to financial purposes, which has not, therefore, the element of confiscation mentioned above, and confines itself to the differentiation between estate inherited by the deceased and that formed by his work and saving. Rignano recognises that through this minimum project the complete nationalisation of all private capital now existing could not be soon arrived at, but he thinks that there might be the beneficial effect of stimulating savings more than is done at present, owing to the combination of the principle of progressiveness in time with that of progressiveness according to the amount of the estate. And Rignano proposes that his reform, thus directed to fiscal purposes, should be applied especially to the extinction of national debts.[3]

The *minimum project* of Rignano, as being a proposal of an exclusively financial character, escapes in great part the objections and criticisms put forward by many writers (including myself) against the maximum project. It is incontestable that the differentiation between wealth saved by the deceased and wealth

[1] Cf. Gini, in *Scientia*, August 1921.

[2] Cf. Dalton, *Inequality of Income*, Part IV. chap. ix., x.; and *Public Finance*, p. 92.

[3] Rignano, *Pour une réforme socialiste du droit successoral.* Paris, Rieder. Part III. chap. ii.

inherited by him would constitute a greater incitement to saving than is the existing system of succession duty. Once recognised the soundness of the principle of progressiveness in time, from the financial point of view, and therefore the utility of its introduction into the financial systems, it will also appear advisable to devote the increased duty on the inherited part of estates to the extinction of the National Debt.

And once this principle is introduced into the system of British succession duty, the amortisation of the debt would be notably accelerated, and there would be an end of the inconveniences presented by the slow, irregular and inefficient system of surplus revenue when it is adopted by itself; while on the other hand the opposite inconveniences of capital levy would be avoided.

The application of the principle in the system of British succession duties would not encounter any great difficulty, as it could easily be introduced into the estate duty, in which it would be co-ordinated with the principle of progressiveness according to the amount of the fortune transmitted by succession. At present the estate duty affects the entire inheritance before it is divided among the heirs, by a charge rising progressively from a minimum of 1 per cent. on fortunes above £100 but less than £500, to a maximum of 40 per cent. on fortunes above £2,000,000. If it were desired to introduce the principle proposed by Rignano, the distinction suggested might begin with inheritances exceeding £5000. That is to say, the present rates of estate duty could be left in force as regards that part of the total estate acquired by the work and the economy of the deceased, while the remainder, which had come to the deceased by a preceding inheritance or donation, could be subjected to heavier charges, and for this part a more rapidly progressing scale might be adopted, distributing the value of the inherited estate into a more limited number of groups. The following scale, for example, might be adopted :—

Principal value of that part of the total inheritance which came to the deceased by preceding inheritance or donation.	Rate per cent.
Above £5,000 but under £15,000	15
„ 15,000 „ „ 20,000	20
„ 20,000 „ „ 30,000	25
„ 30,000 „ „ 60,000	30
„ 60,000 „ „ 90,000	35
„ 90,000 „ „ 130,000	40
„ 130,000 „ „ 180,000	45
„ 180,000 „ „ 250,000	50
„ 250,000 „ „ 400,000	55
„ 400,000 „ „ 600,000	60
„ 600,000 „ „ 1,000,000	65
„ 1,000,000	75

It is not easy to determine what this larger duty would produce, as it cannot be known what part of the fortunes transmitted by inheritance is a result of the labour and economy of the deceased and how much is derived from preceding inheritance. It is, however, incontestable that by means of these high rates a substantial revenue can be obtained, capable of effecting a more rapid extinction of the public debt. The rates proposed (which naturally are only given by way of suggestion) appear rather high, although not arriving at confiscation. But this severity—which would not be necessary in order to attain purely and simply the end of differentiating between wealth inherited by the deceased and wealth created by his labour and economy—becomes indispensable in order to arrive at the rapid extinction of the public debt.

In view of the end aimed at by this larger tax on the part of the estate that had been inherited by the deceased—that is to say, the extinction of the public debt—it would be preferable that the payment should be made in kind. In other words, this special inheritance tax should be paid by means of public debt bonds (valued at a price somewhat above current Stock Exchange price), which should be destroyed; or through other securities—shares or debentures of industrial companies or other easily realisable securities. This principle has, in fact, been already in part accepted in English legislation: from 1919 the death duties can be paid in Victory Bonds; a bond of £100, which was issued at £85, being accepted at par.

The payments made of this special succession duty upon the part of the total estate which had been inherited by the deceased should pass to the National Debt Commissioners, and when cash or cheques are received in payment, the amount of these should be invested in the War Loan or other forms of public debt, and the bonds destroyed: when payment is made in War Loan or other bonds of the public debt, these should simply be destroyed. If, on the other hand, securities of a different character are paid in, the National Debt Commissioners should preserve and administer them for the purpose of selling them on the best possible terms, then investing the proceeds in the purchase of public debt bonds, which should be destroyed; and until this sale is carried out, they should invest the interests or dividends on those private securities in the purchase and destruction of public debt bonds.

These functions of administering the proceeds of this special succession duty which should have the exclusive ultimate purpose of destroying public debt bonds, should be entrusted, if not to the

National Debt Commissioners, to the trustees, who seem to constitute the organ already in existence which is best adapted to this purpose.

It would be desirable that this duty should be paid promptly, for the purpose of accelerating the extinction of the debt. In special cases, however, a brief deferment of payment might be permitted, the debtors being required to pay interest on the deferred payments, at a rate higher than that paid by the Government on the public debt bonds.

The proposal, therefore, seems perfectly applicable in England, where it would not lead to any serious practical difficulties: there it would not only be opportune at the present moment, when England is oppressed by the heavy burden of the National Debt, which is insufficiently and almost insensibly lightened by the system of the Sinking Fund, aided by the ordinary revenue surplus, but it would also be a very *practical* measure. There would be no need of creating new financial organisms or of introducing new systems of obtaining the necessary information, no need to find new taxable material; all that is needed is to introduce into the existing system of succession duties the principle of progressiveness in time, limited to the differentiation, by means of diversity in the rate of charges, between wealth inherited and that saved by the deceased.

Nor should there be serious difficulty in effecting the distinction, which should be purely quantitative, between the two parts of estates transmitted by succession, as it will be sufficient to compare the inheritance received by the deceased with that transmitted by him at his death. The variation in value which property undergoes in the course of time could be duly taken account of by means of a system of index-numbers.

It cannot be doubted that the application of the Rignano project, even within the limits of a financial measure in accordance with the concrete suggestions I have given above, would bring n a large increase on the succession duties, and this would mean an increase in the pressure of taxation on the heirs. The question should therefore be considered whether—as some have objected—the effect of such increase would not be a hindrance rather than an incitement to saving.

The preliminary observation may be made that the application of this reform, which would have the effect of increasing succession duties, would be on the line of a tendency to such increase which has manifested itself in almost all countries, especially Anglo-

Saxon countries. A contrast to this tendency is seen in the abolition, recently effected in Italy, of family succession duties. It may be noted, however, in this connection that this abolition has been considered very questionable even by those who advocated moderation in the duties, which had in Italy reached the point of confiscation; and that in any case the reform has been justified by the proved fact that the succession duty in Italy affected almost exclusively real estate, while in great measure it did not affect personal wealth, especially securities payable to bearer; for which reason it appeared, especially since the repeal of the law making it obligatory for securities to bear a name, an instrument of iniquitous taxation.

In any case, to determine the effects of the proposed reform on saving and on increase of production in England, it must be remembered that the increased taxation would be confined to the portions of estates transmitted by succession which had been inherited by the deceased, and so far as this would bring about a more rapid extinction of the National Debt it would probably result in the productive investment of that wealth which was formerly invested in public debt bonds and paid back by the Government to its creditors. To be more exact, it should be said that if this larger succession duty is paid in public debt bonds, there would simply be an adjustment of accounts between the Government and the heirs possessing bonds; and there would not be in consequence any displacement of wealth productively employed. But if this special succession duty is paid with money already invested productively, there would be a transfer of capital from the hands of the heirs paying it to those of possessors of public debt bonds: the productive investment of certain funds formerly effected by the heirs would thenceforth be effected by the possessors of the public debt bonds. That is to say, there would be a simple displacement of capital, from which, however, might arise differences in its productiveness. It has been, in fact, observed that success in production depends largely on the energy and ability of those who manage the business; so that if the increased duty and the consequent extinction of the debt tended to transfer capital from those who are capable of investing it in the best way to those who are less capable, there would be a diminished production and an obstacle to saving.

As, however, by means of this special succession duty capital would be taken away at the time when the estate of the deceased would pass to the heir, and when, therefore, there would cease to be exercised the capacity and ability to which in great measure

the success of the enterprise was owing, there is no special reason to suppose that the ability of the heirs who would succeed the deceased in the direction of the business would be greater than that of the holders of public debt bonds to whom the State would, by means of the amortisation, transfer the capital formerly invested by the deceased, which would now in consequence be invested by them.

These considerations, moreover, affect only the capital that had been invested directly by the deceased—a case that cannot be called usual in modern business, especially in England. It has been clearly shown that one of the characteristic phenomena exhibited in the economics of the last century is the separation of the possession of capital from its use.[1] That is to say, as a rule capital is not invested by those to whom it belongs: proprietary right tends more and more to confine itself to claiming money payment in return for granting the use of capital to those who have aptitude for investing it; thence the preponderance, especially in England, of Stock Exchange securities among the various forms of property. Business concerns, therefore, and especially joint-stock concerns, maintain their own existence independently of the deaths of shareholders; and in consequence of this normal factor of economic life no diminution of productivity need be feared from the displacement of wealth determined by the higher succession duty imposed for the extinction of the National Debt. For in substance the whole matter would be reduced to this: the State would, by means of the succession duty, come into possession of securities and shares formerly belonging to certain proprietors who as shareholders had no part in the management of the concern, and would sell them to other persons who would become the new shareholders, and as such would in the same way have no part in the management; providing by the proceeds of these sales for the payment of part of the National Debt. And at the end of this process there would probably be a productive investment of wealth by the holders of the public debt bonds paid back by the State.

But for the purpose of determining the effects of the proposed reform on savings it has still to be remembered that, in consequence of the increased succession duty and the corresponding gradual extinction of the debt, there is a displacement or altered distribution of the burden of taxation. On the one hand there is a serious increase in the tax upon that part of inheritances which had been already inherited by the testators; but on the other hand, in so

[1] See Clay, *Property and Inheritance*, London, The New Way Series.

far as the amortisation determines a gradual reduction in the burden of interest, a lightening of other taxes is possible—those on incomes and on commodities.

It remains to be considered whether income-tax is a greater obstacle to saving and the increase of production than would be the duty on the part of inheritances derived from preceding inheritances. If we compare the ordinary succession duties (that is, those actually in operation in the various States, which affect equally the different parts of estates inherited whatever may be their origin) with the taxes on income from the point of view of their effect on production, it is maintained by many that the former are preferable. It is, in fact, affirmed that when the payment of a succession duty is not insured against beforehand, an income-tax and a succession duty of the ordinary type, which produce equally, probably hinder saving to the same extent. But, on the other hand, considering the effects of the expectation of having to pay in future, it seems probable that saving is more reduced by the prospect of having to pay the income-tax year by year than by the more remote prospect of the succession duty having to be paid at an uncertain date.[1] To confirm this conclusion it is also to be observed that while the taxation of inheritances hardly disturbs the development of the economic activity of productive concerns, the taxation of income, by diminishing reserves, hinders their ulterior development.

With regard to the application of the proposal of Rignano, however, the charge on successions would be much larger than the relief that could be granted on income-tax, as a result of the gradual reduction of the interest on the public debt. But as regards the pressure of taxation a sound judgment will be favourable to the proposed taxation of successions. For on the one hand the special heavier taxation on wealth already inherited by the deceased, within purely fiscal limits, by determining the higher valuation of wealth saved than of that inherited, would produce an incitement and not a hindrance to saving; and on the other hand there would be a further incitement to saving in the diminution of income-tax and taxes on commodities, which could be effected in consequence of the gradual liquidation of the debt. Thus the application of the project of Rignano to the extinction of the debt would constitute a double incitement to save and to increase production: first, by the higher valuation of wealth saved than of that inherited; and secondly, by diminishing the pressure of direct taxation.

[1] See Dalton, *Public Finance*, p. 90.

These considerations highly recommend the project of Rignano to Great Britain at the present moment. It would enable that great nation to give a more decided impulse to the amortisation of the National Debt. It is incontestably superior to the Sinking Fund system, helped out by the surplus revenue, which is strongly opposed by the classes of producers and consumers, who desire relief from fiscal burdens and contend for the benefit of surplus revenue; and it is, on the other hand, more practical than the capital levy and presents a smaller sum of inconveniences than this, which also is opposed by English public opinion: these circumstances make it immediately applicable.

The National Debt constitutes to-day a very heavy burden even for the strong shoulders of Great Britain; and its substantial alleviation, by utilising for fiscal purposes the project of Rignano (that is, what he calls the *minimum project*), would ensure a progressively increasing advantage to English tax-payers and consumers.

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REVIEWS

Studies in the Economics of Overhead Costs. By JOHN MAURICE CLARK, Professor of Political Economy, University of Chicago. (University of Chicago Press. December 1923. Pp. 502.)

THIS work purports to be "largely inductive" (Preface); yet "to deal with a body of principle, not a series of disconnected problems" (486 [1]). It might be compared to an atlas which together with the general map of a kingdom contains maps of counties and districts on a smaller scale. To assist the reader in making use of this survey we prefix a sort of key-map showing the relations of the principal topics. In our view a foremost position is occupied by the principle of maximum, the tendency of the net earnings in a business to be as great as possible under existing circumstances. We define net earnings as the proceeds of sales less the cost of production. The proceeds consist of the quantity produced multiplied by the price of the commodity (supposing with our author a business turning out a single homogeneous product); the cost of production is the sum of items, each consisting of the amount of a factor used in production multiplied by the price of that factor; and some allowance may have to be made for the difference between the times at which the cost is incurred and the payment is received. The net earnings are averaged over a period during which the system of factors planned by the entrepreneur (or Directorate) is conceived to operate. But the period during which a factor cannot be varied is not the same for all the factors; some may be treated as "constant" relatively to others which may be changed more frequently. The prices of the finished commodity and of the factors may vary during the periods for which the entrepreneur prescribes. The prices may be determined, not as in the simple case of perfect competition independently of the entrepreneur, but in part at least by him acting as a monopolist.

The outline which we have submitted is now to be filled in with observations furnished by our author. His "overhead costs" correspond to the costs which we have noticed as relatively constant. He is well aware that with reference to long periods these costs are not really incapable of variation. Thus the

[1] The numerals within brackets refer to pages of the book reviewed.

generally received formula for railway costs—that half the operating expenses, and accordingly two-thirds of the total expenses, are constant—is shown by him to be true only with respect to monthly fluctuations of business (274). Let traffic increase to such an extent that heavier rails and more powerful locomotives are required; then some of the two-thirds will have to be treated as variable (113). No "allocations" of cost by refined methods of accounting can be substituted for "a study of the actual changes in total cost produced by changes in output" (194). The designer of a new plant (186) does not treat as predetermined, but is free to prescribe, the magnitude of the factors pertaining to the long run, involving costs that are at a subsequent stage regarded as "constant." He is free to make mistakes; like the late Mr. Rogers who constructed a railroad with grades and curves almost eliminated, at a cost so great that even if there were no operating expenses the earnings would not suffice to cover the interest of the capital invested. The more and the less variable factors must of course fit each other. For instance, corresponding to an assigned set of machines the machine tenders must not be so numerous that each would not be taking care of as many machines as he well might; nor yet so few that the machines would be idle for a considerable percentage of the time, waiting to be restarted by a tender (75). "Somewhere between these two types of inefficiency there is a balance, a point of maximum economy" (76). The aim being the maximum of total net earnings during a certain period, the arrangements directed to that end may be such that sometimes, at a "peak," operations must be carried on at a dead loss. Probably most (American) railroads are losing money on their heaviest month's business (284. Cp. 280). Often operations must be carried on which contribute to the net proceeds less than the business on the average is expected to yield. The "capacity" of the plant, in our author's favourite phrase, is not fully utilised. To avoid the waste of "idle overhead" he makes numerous interesting suggestions which unfortunately we are prevented by the want of space from noticing in detail (see 162 *et seq.*, 272, etc.). Discrimination, of which various methods are instanced (416 *et seq.*), generally increases net earnings, and sometimes proves beneficial to society (428). Discrimination is usually associated with monopoly. But our author maintains that "it is a natural result of overhead costs" (433. Cp. 421). It supposes indeed a general sentiment against "spoiling the market" (422), a conception which the author analyses with his usual elaboration

(439 *et seq.*). There is a tacit agreement not to resort to " cut-throat competition " which would be ruinous to each and all (435. Cp. 139).

From the specimens which we have adduced it will be evident that our author's work is not merely descriptive. He not only furnishes a set of maps, but also a guide-book pointing out paths new to many readers. We leave to those who are better acquainted with the country under survey—to the political philosopher and the statesman who applies economic science—to pronounce on the practical value of the offered guidance. We would especially direct their attention to two topics on which Professor Maurice Clark speaks with special authority, Transportation and Business Cycles. He brings his doctrine of overhead costs to bear on the old issue between railways and waterways (311), and on the new issue, becoming serious in these days of motor-traffic, between railways and highways (307). Holding the balance between the principle of " cost of service " and that of " charging what the traffic will bear," he does not disapprove of such " roundabout " routes as may serve for overflow channels in times of great business activity (294). Seasonal " peaks " are more amenable to correctives than " business cycles." With reference to the latter evil Professor Clark reproduces the remarkable theorem which he put forward in an earlier writing (*Journal of Political Economy*, 1917) concerning the relation between the acceleration of consumers' demand for finished products and the increase of output in the industries which supply capital equipment (390 *et seq.*). For instance, orders for railway " cars " fluctuate far more than traffic; and they are at their highest not when traffic is largest but when it is growing fastest (194). Various remedies for the disorders due to this relation are considered by Professor Clark. The much-advertised panacea of perfectly steady prices is not recommended. " Complete stabilisation of prices to the consumer is at least of doubtful wisdom, but stabilisation of producers' prices is certainly a mistake " (406). Another proposed remedy, lowering prices during a depression, is open to an objection which our author cites from an article by Professor Taussig (*Quarterly Journal of Economics*, May 1921). The reduction may merely lead the customer to wait for further reductions, and so have the reverse effect of what was intended (165). One of the most promising remedies, according to Professor Clark, is to use public works as reservoirs of employment and push them more rapidly when the volume of employment elsewhere is low (311, 410). There had

doubtless not come under his notice Professor Macgregor's article pointing out some difficulties in the way of that promising scheme (*Economica*, January 1923). Professor Clark, regarding the maintenance of the workman as an overhead cost, suggests that part of this burden should be borne by employers. They would thus have an incentive to do all in their power to avert crises (409). There is desiderated an economic organisation which would distribute the burden of this "overhead" more evenly (411).

We should be more disposed to take Professor Clark as our guide in this arduous region, and to follow the new paths which he indicates, if he had performed more to our satisfaction that part of his work which we have likened to a general map on a large scale. We can accept all his middle axioms; of which a good summary is given in the first section of the chapter on the "laws of value and distribution." But we demur to the statement of first principles which is set forth in later sections of that chapter. For the principle of maximum which we regard as essential is set at naught by the doctrine that "if all costs were variable . . . the sum of the marginal products of the different factors (each multiplied by the amount of the factor) would always equal the whole product" (472. Cp. 470, 473). No doubt there is a point of view from which, the entrepreneur's service being regarded as a factor of production and his remuneration as a portion of the cost, the above statement is admissible; and indeed with that understanding has been made by some of the greatest economists. But here, where we are considering an entrepreneur or Directorate marshalling the factors of production so as to realise the greatest possible difference between the produce of those factors and their cost, it would not be proper to treat that difference as an element of the subtrahend cost. Professor Clark's own illustration will serve to illustrate our contention. "Suppose 100 acres of land, cultivated with 1,000 days' labour per year and raising 20 bushels of wheat to the acre. Suppose cultivation has reached the normal stage of diminishing return for further application of labour to the land, and that accordingly 1,050 days' labour per year on the same 100 acres would yield 2,060 bushels." "But . . . suppose we have 1,050 days' labour to spend on 100 acres and are offered 5 acres of land. This would restore the original 'proportion of factors' and the crop would then be 20 bushels per acre again or 2,100 bushels in all"[1] (472). "The

[1] Let $F(x, y)$ be the output depending on the factors x, y employed in the best manner available. Let P be the price of the commodity produced (corrected

truth is that the marginal products of land and labour . . . are so related that the sum of the marginal products must equal the whole." This proposition, reinforced by the "proportion of factors" (cp. 84), leads on to a second proposition, which Professor Clark seems disposed to accept at least in the case where there are no overhead costs: namely, that the relation between product and factors may be represented by the mathematical expression known as a "homogeneous function" (473). Those propositions seem contrary to common sense based on experience of physical and human nature. The second proposition implies that throughout the arts of production the relation between means and end can be represented by one and the same simple mathematical formula. Both the propositions imply that entrepreneurs seek to employ the factors of production in such wise as to leave for themselves no share of the product.[1]

Our criticism does not purport to be a *reductio ad absurdum.* It would be absurd to use such an argument against an author of Professor Maurice Clark's calibre. Rather we regard his more abstract reasonings like those "perspectives" which, according to Shakespeare, "rightly gazed upon"—viewed from an ordinary obvious standpoint—"show nothing but confusion;" "eyed awry"—examined from some peculiar unusual point of view—"distinguish form"—would no doubt present an intelligible meaning. The obscurities which we have noticed may at least serve to confirm the author's advice to business men, that they might do well to omit the chapter dealing with marginal productivity (Preface). We are disposed to place in the same

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perhaps by the consideration that the payment is future); and let p_1, p_2 be the prices of the factors respectively. The magnitude to be maximised is then $PF(x, y) - p_1x - p_2y$. Supposing perfect competition, in which P may be treated as fixed independently of the individual entrepreneur in the position of equilibrium $P\left(\frac{dF(x, y)}{dx}\right) = p_1$; $P\left(\frac{dF(x, y)}{dy}\right) = p_2$ (where the outside brackets indicate *partial* differentiation); provided that in the neighbourhood of the resulting values for x and y the function F fulfils the conditions of a maximum. Those conditions are not fulfilled by the position indicated in the example; at which a step in the x direction is downward, while a step in the x direction coupled with one in the y direction brings you to the original level. If $F(x, y)$ is represented by the height, say Z, of a surface above the horizontal (or, better, above the sloping plane of which the height above the horizontal, say z, $= p_1x + p_2y$), then $Z - z$, the net earnings, will not be a maximum; the surface will be saddle-shaped in that neighbourhood, not as it ought to be, dumpling-shaped.

[1] With respect to the first paradox see the present reviewer's *Collected Papers,* Vol. I., p. 31 (a passage quoted by Professor Clark from the *Quarterly Journal of Economics,* 1904); with respect to the second paradox see passages in the said Collection referred to in the Index, *sub voce* "Entrepreneur's remuneration not null."

category, as "perspectives," many of the author's explanations of abstract principles. Thus we could dispense with the "law of proportion of factors" (72 *et seq.*), the suggestion that in a normal state of industry "a proportionate increase or decrease in all the products turned out carries with it a proportionate increase or decrease in costs" (84). We have seen what paradoxes the "proportion of factors" led to in the case of land and labour applied to the production of wheat (472). Again, the meaning of "diminishing returns" appears to be needlessly restricted and obscured by defining it as referring to some factor or factors "representing only a *part* [author's italics] of the total expenses of production" (70 and context). We submit that much circumlocution and mystification might have been avoided by keeping in mind the conceptions appropriate to the mathematical theory of maxima and minima. But these reservations refer only to the author's semi-mathematical reasoning, not to the less abstract observations and reflections which emerge. Thus the paradoxical proposition that "the sum of the marginal products of the factors equals the whole income of the business" (474), leads up to the important truth which seems to be conveyed in the following statements: that "in dull times the concern pays its bond interest out of the marginal products of its variable factors of production" (*ibid.*), that "when a concern protects its overhead and refuses to engage in 'cut-throat competition' it is paying labour less than its immediate marginal product" (469). We should reach a similar conclusion starting from the less precise, though perhaps more accurate, premiss: that the total cost of all the factors is intended by directing minds, and so tends, to be less than the whole income of the business. This tendency must encounter resistance, when overhead costs are heavy, if unrestricted competition acts. For in perfect competition the increment to income obtained by taking on the marginal increment of a variable factor is just equal to the cost of that marginal increment. But the price determined by this rule may well be such that the total income—the product multiplied by that price—may not cover the total cost, that of the variable factors and the overhead, not to speak of profits. The rule, however, does not hold good in monopoly,[1] and is presumably

[1] In the symbols employed in note to p. 249 the net income of a monopolist is $PF(x, y) - p_1x - p_2y$; where P is no longer treated as constant, but as a function of F, being the price at which an assigned quantity of the finished commodity will be taken by the market. We have then for the determination of x the equation

$$P\left(\frac{dF}{dx}\right) + F\left(\frac{dP}{dx}\right) = p_1$$

relaxed in that semi-monopoly which our author well describes as prevalent in industries with overhead costs. Accordingly in such industries it is quite conceivable that a workman is not paid as much as by his work he adds to the income of the concern, as much as the firm would forgo if that man were to be withdrawn. This departure from the rule of pure competition is important, in view of modern theories of distributive justice and modern conditions of industry. While Professor John Bates Clark teaches that the ideal remuneration of labour is its marginal product,[1] Professor John Maurice Clark finds that wages are commonly below that marginal product.

F. Y. EDGEWORTH

The State Theory of Money. By GEORG FRIEDRICH KNAPP. (London: Macmillan (on behalf of the Royal Economic Society). 1924. Pp. xviii + 306. Price 10*s.* 6*d.* net.)

SINCE it appeared, twenty years ago, Prof. Knapp's very remarkable book has taken its place in economic history. Its appearance in an English translation is something of an event. The book has deeply influenced German thought on monetary theory. It is sometimes said that Prof. Knapp made paper money respectable, and that some of the responsibility for the monetary outrages perpetrated by Germany and other countries since 1914 ought to be laid at his door. This accusation is, I think, unjust. Folly was hardly more conspicuous in the currency policy of Germany than in that of Western European countries where he had little influence. If the penalties fell more heavily on Germany, that was her misfortune.

The mistakes of Germany and other countries were not due to too much clear thinking. Prof. Knapp's book is above all an aid to clear thinking. Even where his reasoning is fallacious (and his greatest admirers would not claim that he is infallible) he states what he means so boldly and unequivocally that criticism

(with a like equation relating to y). Thus $p_1 \Delta x$, the payment for a unit of labour is no longer equal to $P\left(\frac{dF}{dx}\right)\Delta x$, the addition to the entrepreneur's income made by taking a marginal unit of labour, but to less than that increment, since $\left(\frac{dP}{dx}\right.$ is negative. Likewise in semi-monopoly it is intelligible that the entrepreneur receives from the consumer of the marginal product in addition to the payment of the marginal labourer a certain "oncost" which goes to payment of overhead costs and the remuneration of the entrepreneur.

[1] Distribution of Wealth referred to in the ECONOMIC JOURNAL, Vol. X., p. 537, and Vol. XVII., p. 537.

is facilitated. Such a book will always be of special value to students, who will find in it a corrective of much that they are taught to regard as orthodox.

Prof. Knapp contrasts money properly so called with a precious metal used merely as an exchange commodity. The exchange commodity may be used as a means of payment, but if so, it is measured *by weight* (pensatory). The characteristic of money is payment *by tale*, and payment by tale requires pieces that are to be told, which must be defined by law. A "legal non-pensatory means of payment" Prof. Knapp defines as "chartal" (one of the less forbidding of the many technical terms he has coined).

He distinguishes two main divisions of chartal money, which he calls hylogenic and autogenic. A "hylic" metal (from which the former term is derived) is a metal which may be converted into money without limit (p. 61). It may be itself coined into money, or the State may issue money (*e. g.* paper or metal tokens) in exchange for it. By conversion into money "without limit" Prof. Knapp does not mean conversion on demand for all comers, but merely without any express statutory limitation of quantity, such as the restriction in Germany of the subsidiary coinage to a certain amount per head of population. (Apparently, therefore, the English or American subsidiary coinage would be classed as hylogenic, though he speaks of silver being hylic in England as a thing of the past (p. 65).)

Specie is that hylogenic money which is actually coined out of the hylic metal, the content of metal being in a prescribed proportion to the currency unit (pp. 62–8). Prof. Knapp points out that the use of specie money does not of itself fix the value of the currency in terms of the hylic metal. In order to do so, it is necessary to establish on the one hand free coinage, and on the other a regulation of least current weight (pp. 81–3). The latter he describes (p. 74) as "a relapse into the pensatory system." The line between specie money so regulated, and coins which pass solely by weight, is a fine one, but the coin that passes by tale and is either fully valid, or, if below the limit of weight, is not valid at all, is clearly distinguishable from one that passes by weight whatever its weight may be.

Hylogenic money other than specie is not actually coined out of the hylic metal, but is issued in exchange for it. In order that the value of the currency unit may be fixed in terms of the hylic metal, the State must undertake to buy and sell that metal for money on demand without limit. The gold certificates in the U.S. would seem to be an example.

Autogenic money includes both paper money and metallic money, issued otherwise than in exchange for a hylic metal.

These distinctions (which are no more than an incomplete summary of Prof. Knapp's analysis) lead up to a new aspect of the problem, a classification of money *by function.* He distinguishes obligatory (legal tender) money from facultative, and convertible from definitive. Facultative money includes State notes and Bank notes which are not legal tender.

In addition he takes account of the *administrative practice* of the State. The State in making and receiving payments can give a preference to any particular kind or kinds of money, and no amount of study of coinage laws, legal tender laws and banking laws will reveal the true basis of the currency, unless account is taken of this power. The money to which the State gives a preference in making its own payments Prof. Knapp calls *valuta* money; other money he calls *accessory.*

Valuta money is his most characteristic concept; it is the concept from which the title of the book is derived. "A theory," he says in his Preface, "must be pushed to extremes, or it is valueless." He has not shrunk from pushing the theory of valuta to its logical consequences. And in doing so he has in reality been compelled to modify its original simplicity.

Private individuals in the long run can only make payments in the media that they receive. A State is not ordinarily exempt from the same limitation, and can indeed only escape therefrom when it is meeting its liabilities with paper money freshly issued for the purpose. Paper money already in circulation, or issued by a bank separate from the State, is as much subject to the limitation as any other means of payment.

Prof. Knapp is therefore led on to consider the case of a State which, after selecting a particular money to be valuta, finds that other (accessory) kinds of money are received by it and accumulate upon its hands. To apply his theory of valuta he is compelled to include a central bank of issue as one of the "State pay offices," and the payments made by such a bank to its depositors and note-holders as payments by the State. If accessory money accumulates, it is in the vaults of the central bank; and to the central bank is entrusted the duty of maintaining an adequate reserve of valuta money, and making payments therefrom.

Thus the State theory of money becomes a central bank theory of money. A central bank is undoubtedly an organ of the State in that it is a creature of the legislature. But it is not necessarily *administratively* a part of the State.

Prof. Knapp distinguishes changes of standard (*i.e.* of valuta money) which are "obstructional" from those which are "exactory." The former are those which are adopted to avoid an accumulation of accessory money (*e.g.* of the cheaper metal under a bimetallist system). The latter are pushed through in spite of any inconvenience from accumulation (p. 194).

An obstructional change is one which arises out of some change of circumstances affecting the existing coinage or currency laws. An exactory change originates not in a change of circumstances, but in a change of policy. The coinage and currency laws have to be adapted to it, and during the interval of adaptation accumulation may occur.

A critic can hardly help asking whether Prof. Knapp has not attributed too much importance to his notion of valuta money. Is it not exceptional for either the State or even a central bank to try to exercise a preference in favour of any particular means of payment? An "obstructional" change of valuta is in reality simply the absence of a preference; it is a mere acquiescence in circumstances. And the circumstances are simply the exercise of preferences by people other than the State in making their payments. An exactory change is a possibility, and Prof. Knapp is quite right to adduce it as such, but it is an exceptional occurrence and is not fundamental in currency theory.

Prof. Knapp devotes the concluding chapter of the English edition (a further chapter and some appendices have been omitted) to international currency relations. This chapter has less value than the others, in that it is dominated by the fallacious nineteenth-century doctrines of the foreign exchanges. According to Prof. Knapp the exchanges are determined "pantopolically," that is to say, by the balance of payments. He will not admit the relevance of the quantity theory or indeed of anything to do with the purchasing power of the currency unit. His explanation of the working of an increase in discount rates (pp. 259–261) is consequently summary and superficial.

He regards dealings in foreign exchange as dealings in valuta money, "which is the most important, and gives character to the monetary system" (p. 216). It would have been more accurate to follow the usual definition of writers on foreign exchange and to describe them as dealings in *debts*. What Prof. Knapp seeks to define as valuta money is, in fact, that money which is in practice used for actually paying debts, and which is therefore most closely related to the monetary unit of account. His masterly analysis of money in all its aspects might

perhaps have been simplified if he had given more prominence to this fundamental idea.

R. G. HAWTREY

Financial Reform. By HENRY HIGGS, C.B. (London: Macmillan & Co. Pp. 91.)

"THE study of national finance," writes Mr. Henry Higgs towards the end of this stimulating book, "is something which is incumbent upon us all as citizens of this country, and it would be a patriotic act if we all registered a vow to enlighten ourselves fully upon our duties as citizens in respect of our understanding of the financial matters of the country. . . . The conclusion of the whole matter is that Financial Reform calls, like the dying Goethe, for 'Light! More Light!'" This is the theme of the whole book, which is based on four lectures delivered to the Institute of Bankers in London at the end of 1923. In Lectures I. and II. Mr. Higgs criticises, somewhat severely, the financial system of Great Britain. In Lecture III. he deals with taxation, and in the concluding lecture with currency and credit. The author has added an introductory chapter and also a Conclusion, so that "the volume may be regarded as a political tract, using the word 'political' to indicate what pertains to the art and science of government." The criticisms of the author derive additional weight from the fact that he is no mere doctrinaire, but is also a retired Civil servant of H.M. Treasury.

Mr. Higgs first points out that in his opinion the financial system of Great Britain is too complicated and too difficult for a single-handed Chancellor of the Exchequer to perform efficiently. He then shows that even Civil servants are not the paragons they ought to be, and thirdly, that the House of Commons has no real control. In these circumstances he puts forward several constructive criticisms which merit detailed examination.

In regard to the Finance Minister himself we had better quote the author's own words, as it is necessary to be absolutely fair to the author. "If mankind is as indolent as it dares to be, Ministers of Finance are, in this respect, serious offenders. Conscious of a precarious tenure of office, anxious to alarm the public as little as may be by innovation, and careful to offer the smallest possible target of criticism to their political opponents, they take a short view of finance, pursue an opportunist rather than an idealistic policy, and are satisfied to patch up the finances of the year by the smallest feasible adjustment. Before the Great War the financial circumstances and needs of the nation varied

comparatively slightly from year to year, and petty expedients sufficed to tide over the transitions. But the war has revolutionised the situation by rapid and violent changes, and the time has come to reconsider our financial problems and our financial methods." It is difficult to obtain an expert Chancellor, since the Prime Minister's choice is limited to a small number of members of the House of Commons on the Government benches. In support of his views, Mr. Higgs tells the story of Lord Randolph Churchill, who said to his private secretary, Mr. George Gleadowe of the Treasury, on examining a Customs revenue return which showed an increase of ·34, not 34 per cent.: "I have often seen those damned little dots before, but I never knew until now what they meant." Mr. Gleadowe used to conclude this by saying, "And yet I am satisfied that Lord Randolph would have made an excellent Chancellor of the Exchequer, *as Chancellors go*." It is doubtful whether Mr. Higgs does justice to a long line of Chancellors of the Exchequer, which includes the names of Pitt, Peel, Gladstone, and Disraeli. The recent utterances of Mr. Winston Churchill in the House of Commons on the subject of France's external debts, which expressed the views of the country so admirably, hardly show the system to have broken down as the author of *Financial Reform* would have us believe. It is true that in the United States the President may select as Secretary of the Treasury any citizen provided he is not a Member of the Senate or the House of Representatives. If he should select a member of either House, that member must resign from Congress before becoming Secretary. But has the United States shown that this system is superior? Moreover, the Chancellor "has the advantage of consulting people, of getting assistance and expert advice from all quarters" (p. 14).

The question may here be asked, "Do not the Civil servants in the Treasury act as competent experts?" "No," says our author. The Civil Service is restricted for the most part to what may be termed the actuarial and administrative part of Revenue operations. The Chancellor may ask how much the yield would be affected by an increase or decrease of so much in a tax, but he makes up his Budget secretly, so that except for the Cabinet it is seldom known until the Budget is presented what exactly the Chancellor's proposals are. Mr. Higgs believes, after forty years' experience in the Civil Service, that the official requires more light. The Treasury officials he believes "correspond more or less with a Board of Admiralty, the members of which have never been to sea, or an Army Council the members of which have

never been in the army." He shows that Treasury officials are neither expected nor supposed to have anything to do with matters of high policy, such as the methods of raising taxation or of the objects of public expenditure. He also holds that the House of Commons is not well informed on the facts of finance, as the national balance sheet is incomplete. Mr. Higgs is somewhat over-severe when he says that should a financier by chance happen to be elected to the House, he usually treats it like a box at the opera, *i. e.* as a social distinction. Younger members interested in finance are discouraged from speaking frequently by the Whips, because speeches prolong discussion. He concludes that Parliament cannot and does not scrutinise estimates as it ought to do.

The remedies proposed may be summarised briefly as follows: (1) "It should not be impossible for the Chancellor of the Exchequer now to be advised by a body on which bankers and representatives of the great industries of the country, employers and employed, should be represented, and that he should discuss with them, in confidence if you like, the proposals which he is going to make, before he introduces them into Parliament;" (2) there should be in the Treasury an Inspector-General of Finance, "who should be charged with the sole duty of looking into public expenditure, of going where he likes, making what inquiries he thinks fit, and by means of statistical comparisons and microscopical examinations of samples to detect waste, irregularity, extravagance, mismanagement, bad administration, lack of co-ordination, and all the other things which lead to increased charges upon the public purse;" (3) the Treasury should set up an Intelligence Department or Bureau of Research capable of producing facts and figures as published in some other countries; and (4) Civil servants should receive special training in economics, statistics, finance, constitutional law and history, the art and science of civil and financial organisation and administration.

The first of these remedies assumes that in the framing of the Budget the Chancellor of the Exchequer and the Cabinet are not advised by outsiders. Is this so? Does not Mr. Higgs in some degree minimise the use of the telephone, the power of the Press and the influence of trusted advisers of the Treasury in the City of London and elsewhere? The Treasury letter-bag contains correspondence from many quarters, and it may be said, without fear of contradiction, that the Chancellor of the Exchequer is in closer touch with City opinion than is generally recognised. The working of an Economic Council, similar, for example, to

that of the Federal Economic Council in the German Reich (which consists of 326 members nominated by ten groups), might mean serious delay. Moreover, there would be an absence of secrecy so vital for the preparation of the Budget. The second proposal, the appointment of an Inspector-General of Finance, is very attractive. One officer like this might do much good, and the recent experience of the League of Nations shows what can be effected by one officer, like, for example, the Director of the Economic and Financial Section of the League Secretariat. There are in the British Treasury a Controller of Finance, a Controller of Establishments, and a Controller of Supply Services, and it is presumed the duties of the proposed Inspector-General would not in any way clash with theirs. The third proposal would lead to an improvement in the facts and figures on public finance. There is at the moment a Director of Financial Inquiries under the Controller of Finance who deals with economic and financial inquiries. Mr. Higg's proposal, however, is to have a separate division of the Treasury devoted to this all-important work. Mr. Higg's proposal appears to be one that merits the most careful consideration. Budget speeches, answers to important questions in the House, translations of important revenue laws in other countries, etc., would be undertaken, and perhaps it might be possible to bring the whole of the accounts into one balance sheet based upon function (as in the United States) and not merely upon departments. It might also be advisable to do away with the present division of public expenditure into Consolidated Fund Services and Supply Services. The fourth remedy may be compared with what is in vogue in the navy and in the army, where there is a Staff College and General Staff. From the products of these Staff Colleges is recruited the General Staff, the brain of the navy and army.

Lecture III., on taxation, is a plea in favour of taxation based on financial capacity which in turn (he holds) can only be gauged by net income and net capital together. In preference to indirect taxation, especially luxury taxes (to which he is opposed), he would aim at direct taxation adjusted to net income and net capital. He approves of a small annual charge in respect of ownership of capital. Direct taxation adjusted to net income and net capital Mr. Higgs regards as the ideal to which democracy must march. This may be in Great Britain, but it is certainly not a general proposition applicable say to India and the Dominions. In some countries, as in Switzerland, supplementary revenue is to be derived not so much from direct as from indirect

taxation. The taxation of alcohol in Switzerland to-day is about one-fourth of what it is in France and Great Britain per head of population. From tobacco the taxation per head is one-fourteenth that of France and Great Britain. The Swiss national income is as high as £60 per head of population. Opposition to luxury taxes should not be based on the ground that they are not a deterrent on wasteful expenditure. The financier has to look to the characteristics of the tax as a whole, especially to the productivity of the tax. It is doubtful whether Mr. Higgs's remark that "the time has come for some more rational method than the estate duty" would be accepted. The effects of the tax are not quite so bad as is sometimes said, and the Treasury is now able to budget from year to year with a fair amount of accuracy the proceeds of estate duties. A tax on capital has been tried (not without success) in Holland, Germany and Sweden. In Sweden the taxable income is increased by one-sixtieth of the capital and it is working satisfactorily. It would not, we think, be wise to overhaul the taxation system of Great Britain in this way. A judicious blending of direct and indirect taxation is, all things considered, preferable. Nevertheless, as Mr. Higgs notes, taxable capacity and the effect of the various taxes should be watched.

Space will not permit of the examination, except in the briefest possible manner, of the third main topic of these lectures—currency and credit. Had the book been on "Public Finance," and not on the more general question, "Financial Reform," we should have considered this question as outside the subject-matter of the lectures. Currency and credit belong to economics and to that part of economics—banking. Mr. Higgs shows the importance of stability in a country's currency. Without stabilisation a Budget cannot be ordinarily balanced, and without a balanced Budget a currency cannot be stabilised. The author thinks that the Bank of England merely assists in carrying out the actual operations of loans and in advising the Government on what conditions it can borrow. We wonder if this is an accurate description of the present degree of contact between the Bank and the Treasury. Mr. Higgs does not refer in detail to Professor Irving Fisher's "ideal index-number" owing to want of space. He is not in sympathy with those who contend that the Bank of England could regulate prices by variations in credit and the rate of discount. "That theory," he says, "appears to be what the French call *trop simpliste*—too simplified. It omits the consideration of many complex factors, some of them small in themselves, but as important as the element of friction in engineering."

The construction of an index-number suitable for this purpose is, we think, almost an insuperable difficulty.

Mr. Higgs's book is a timely reminder that the financial armoury of a country requires refurbishing from time to time, but, it is needlees to add, this cannot be done with a Turk's-head mop. Credit is a delicate piece of furniture. The constructive criticisms of an ex-Treasury official who is also a close student of financial affairs shows that an inquiry into the financial system of even Great Britain may be advisable. The author of *Financial Reform* is on sure ground when he criticises the financial control of Parliament. A Budget Committee of the House of Commons, similar to that in France or to the Fourth Committee of the League of Nations, would certainly be a step in the right direction. Officials of the League and of the International Labour Office have to justify proposed expenditure in a way that they would not be asked to do before any Committee in England. Other attractive suggestions, as already noted, are the proposed Inspector-General of Finance and the formation of an Intelligence Department or Bureau in H.M. Treasury. Mr. Higgs believes that the Universities should do more. "This light, so much needed by the Cabinet and the Chancellor, the House of Commons and the Civil Service, and by the people at large, whence is it to come? It should radiate from the higher centres of learning—the Universities—but must first be installed there. As a young man the present writer was compelled to enter himself at the University of Berlin to study Finance under Adolf Wagner, and to go to Paris to attend the lectures of Paul Leroy Beaulieu, because he was unable to find a teacher of Finance in this country. With the remarkable exception of the London School of Economics things are not much better here now in this respect than they were thirty or forty years ago." He regrets that Cambridge and Oxford have each still but one Professor of Economics and no Professor of Finance.

G. FINDLAY SHIRRAS

Studies in Current Problems in Finance and Government. By SIR JOSIAH STAMP, G.B.E., D.Sc. (P. S. King and Son. 1924. 10*s*. 6*d*.)

SIR JOSIAH STAMP, theorist and practician, savant and man of affairs, is in the great English tradition; and the appearance of another of those sober volumes in which at fairly frequent intervals he embodies the bye-products of his portentous industry is an event of importance in the economic world. We are

informed in the preface that some of these studies have been reprinted owing to the importunity of correspondents, others because the author himself sets store by their message. We are left to make the division for ourselves, and there is risk of error; but if I were the father of this blooming family of twelve, it is, I think, over the careers of Nos. I. and III. that I should indulge in the fondest hopes. The former is an appeal to professional accountants to play the part which they alone can play in clothing the skeleton of economic theory with the flesh and blood of ascertained fact. In the latter he invests with new point and freshness the well-worn theme of the contrast between business enterprise and Governmental administration, laying stress on the special obligation which rests upon the latter to achieve *consistency* or *uniformity* in the exercise of its functions. But most of the other children too are full of health and vigour. In his long and intricate discussion of the capital levy, Sir Josiah Stamp speaks what most people will probably now be content to regard as the last word on the difficulties of valuation and on the probable automatic effects of a given levy in diminishing the future yields of given rates of taxation. In his advocacy of an index of production, he makes the interesting suggestion that "a certain number of firms in every industry should render a voluntary return to the Statistical Department of the Board of Trade every quarter," the resulting sample being subjected to correction at longer intervals in the light of each successive census of production. In his lecture on rent restriction he argues forcibly that where wages are regulated on a cost of living basis, the burden imposed on landlords benefits the community as a whole rather than the working-class tenants. Other authoritative studies deal with profits and wages, double taxation, and direct and indirect taxation; and the volume closes with a welcome reprint of the author's classic paper on the Wealth and Income of the Chief Powers in 1914.

It would need a rash reviewer to join issue with Sir Josiah Stamp on matters in which statistical expertness or practical wisdom are at stake; but on one or two points of pure theory there is room, I think, for difference of opinion. It is surely not in accordance with received English doctrine to suggest, as the author seems to suggest on p. 19, that price must cover the costs of those firms which are "marginal" in respect of *human* advantages ("excessive salaries, less efficient machinery, etc."), as well as in respect of natural situation. On p. 219 Sir Josiah seems to imply that the desirability of progressive taxation follows

directly from a combination of the doctrines of equal sacrifice and the diminishing utility of income: whereas, in fact, either the subtler doctrine of "equi-proportional sacrifice" or a particular view about the rate at which the utility of income diminishes is needed. But possibly here, as I think in some other places, the preservation of the oral form in which many of the studies were first embodied militates against perfect lucidity and elegance of expression.

The uncompromising statement (p. 79) that "Taxation spent on armies and navies is therefore in a class by itself for economic loss, quite different from all other Government expenditure," seems to be true only on the rather peculiar assumption made in the context, that the political and psychological difficulties of disarmament have been solved, while human nature remains unregenerate in all other respects. From suitable premisses we could equally well argue that "taxation spent on policemen, and on Inland Revenue experts to frustrate tax-evasion, is in a class by itself for economic loss." Nor will everyone agree with the author (p. 138) that the services of War Loan holders can be confidently excluded from the national income on theoretical grounds. This seems to be one of those dilemmas to which there is no theoretically water-tight solution, but which need cause no trouble to anyone who is prepared to deal appropriately with the difficulties involved on each several occasion that they arise.

D. H. ROBERTSON

The Science of Public Finance. By G. FINDLAY SHIRRAS. (London: Macmillan and Co., Limited. 1924. Pp. viii + 677. 21*s.*)

PROFESSOR BASTABLE issued the last edition of his *Public Finance* in 1903. For twenty years it has remained the standard text-book on the subject in English. But even before the War large sections of it were already out of date, both in matter and in spirit. After the War, the need grew still more urgent for some work which should reconsider the Principles of Public Finance in relation to the numerous and important changes, manifest in financial theory, financial policy and financial administration. It seemed as if this need was to remain for ever unsatisfied. But at last the long-delayed attempt has been made, and made with every prospect of success. Mr. Shirras has produced a work which, at the present time, has no dangerous rival to fear and may, indeed, be recognised for long in the future as

the standard text-book on Public Finance. The accuracy, the abundance and the variety of the information which Mr. Shirras has gathered from sources not always easily accessible, must place all students of the subject deeply in his debt. Thanks to Mr. Shirras, we now possess in English a comparative study of recent developments in financial theory and policy which, for breadth and completeness of treatment, is not unworthy to rank with the great continental treatises.

Mr. Shirras's book is perhaps most stimulating and most serviceable in those descriptive sections which compare, with an almost rank luxuriance of detail, the financial measures and the financial administration of different countries. Moreover, these sections make available to the student a clear, discriminating and compact presentation of the interesting and significant features buried in the mass of Blue Books which have accumulated (in various languages) round questions of Public Finance since 1903. Nor does Mr. Shirras make the mistake—common to financial writers—of ignoring the significance of the past. Among the descriptive and historical sections worthy of special mention are the following: the account of Central, Provincial and Local Expenditure (Book II.); the exhaustive chapters on the Land Tax and the machinery and evolution of the Income Tax and the Death Duties (Book III.); the History of the Public Debt (Book IV.); the chapters on Financial Administration (Book V.). Attention should be directed, too, to the many sections dealing minutely and at great length with Indian Finance—the *disjecta membra* of a separate volume which might, with little addition, be published under the title "Public Finance in India."

Three points may be emphasised, in which Mr. Shirras's book is superior to any which has preceded it. Mr. Shirras has offered us the most comprehensive and elaborate consideration of "Public Expenditure" with which I am acquainted in English. This is a branch of Public Finance which must attract increasing attention, now that the State has definitely adopted a constructive industrial and commercial policy—a new and, let us hope, more scientific brand of eighteenth-century Mercantilism. The chapters on Public Expenditure (Book II.) are noteworthy for a commendable attempt to treat, with some exactitude, the relation between Public Expenditure and National Income, and for an interesting discussion of the scope, growth and theory of Capital Expenditure. Secondly, in no other general text-book of Public Finance have I found a more detailed and instructive examination of the intricate problems, "Double Taxation," "Taxable Capacity" and

"The Burden of Taxation," than that submitted by Mr. Shirras in Book III. (Public Revenue). Lastly, Mr. Shirras has sought to impress upon the reader the intimate connection between Public Finance and the progress of statistical technique. In addition to numerous tables, incorporated in the text, there is a Statistical Appendix of forty-five pages, concerned with questions such as "The Finance and Commerce of Various Countries," "The Growth of Expenditure, allowing for Prices in Various Countries." There are, too, detailed tables relating to the Public Finance of India.

The arrangement of the embarrassing wealth of material which Mr. Shirras has amassed leaves little to be desired in point of clearness and convenience. The book, too, is readable, being enlivened by the introduction of epigrams, extracts from letters, and quotations from Parliamentary debates; occasionally it is enlivened by an unintentional mixture of metaphors (*cf.* pp. 17 and 488). There are many misprints and a few omissions of words. Loose writing is not uncommon (*cf.* pp. 115, 161, 203, 346).

In considering Mr. Shirras's work as a whole, I feel that his main strength lies on the realistic side of his subject. He is less successful in correlating and expounding the essentials of other people's thoughts than in compiling and marshalling other people's facts. He shows, too, little trace of independent judgment or of original and acute analysis. The theoretical portions of the *Science of Public Finance* are, thus, less valuable than the descriptive. I do not think, however, that they are less valuable than the corresponding portions in the old text-books. Yet the explanation both of terms and theories cannot always be commended for clearness. In a work of this kind it is a mistake to leave the reader to disentangle the meaning of a new term from a mass of often bewildering details or indirect references.

Mr. Shirras's conclusions about complex questions, which may admit of conflicting opinions, are sometimes too sweeping. We have, for instance (p. 167), the statement, unsupported by evidence, that "Experience in recent years has shown that . . . the application of the progressive principle has never been allowed to increase to the point at which the desire to develop industry is imperilled or the accumulation of capital retarded." Occasionally Mr. Shirras sees only one side. Consider, for instance, his reference (p. 461) to the system of percentage grants to local expenditure. He quotes with approval a long passage from the Geddes Committee's Report, recommending its abolition and the adoption of a block grant system, but leaves the matter there. He says

nothing about the very serious objections to the block grant system—the difficulty of finding a basis of computation, which would be equitable throughout the country, and the necessity of constantly varying such a basis (if fixed) to meet the exceptional circumstances which must arise from time to time.

Some of the theoretical sections would seem to have been huddled together in a hurry.

There are certain passages, for instance, which are obviously adapted, with slight verbal alterations and the omission of an occasional sentence, from Dr. Dalton's *Public Finance.* In subsequent editions it would be advisable to refer readers to the place of origin or else to omit the passages—they are none of them of any considerable importance. The passages are: paragraph 11, p. 38, added as an afterthought to the chapter on "Characteristics of Public Expenditure" (Dr. Dalton, chap. iii. § 5, p. 20, and chap. xvi. § 1, p. 154); the passage on p. 190, beginning "Not a few writers . . ." and continuing to the close of the section (Dr. Dalton, pp. 67–8); the passage on p. 181, beginning "The total direct money burden . . ." and continuing for 15 lines (Dr. Dalton, pp. 50–1).

It is perhaps ungracious in the case of a work which covers so much ground, and upon which such care and industry have been lavished, but I should like to draw attention to a few omissions and a few small flaws in reasoning.

In chapter viii. Mr. Shirras deals with expenditure on English Poor Relief, Old Age Pensions, Unemployment Insurance, etc. He says nothing about (1) the peculiar relation which the events of recent years have established between Poor Relief and the other social services; (2) the necessity for the whole expenditure (central and local) out of public funds on Public Assistance being so accounted for that it can be kept under continuous observation in total as well as in detail. On p. 168, in the section on "Progression and the Nature of Income," nothing is said about differentiation between equal incomes received by people in different economic situations. In the section, "The Incidence of Taxation on Commodities" (p. 190), the significance should be noted of the three conditions under which the commodity taxed may be produced. In the chapter on the history of the Income Tax (p. 241), the application of the tax to Ireland by Mr. Gladstone in 1853 was worth mentioning. Peel's Act of 1842 did not extend to Ireland, the repeal of the Assessed Taxes in Ireland in 1823 having abolished the machinery for assessment and collection. On p. 318, only one sentence is devoted to the Succession Duty in

Germany, and that sentence is misleading. "In Germany," says Mr. Shirras, "practically all States levy succession duties." But to-day the States are forbidden to levy such duties. The Reich levies them and assigns the States their proper quotas. I should like to make three points with regard to Mr. Shirras's examination of the characteristics of external and internal public debts (p. 475). (1) He seems to have had in mind (in the case of the external public debts) solely the case of a relatively undeveloped debtor country. (2) He might have explained clearly, and not merely implied, one difference—rather important in the light of recent events—between the paying of internal and external debts. A government can discharge debt to its own nationals in the money raised by imposing taxation in excess of what is required to meet ordinary expenditure. But the surplus money derived from taxation can be used only to a small extent in the payment of an external debt. (3) Mr. Shirras deals at some length (p. 484) with the direct burden of an internal public debt, but does not seem to have realised adequately the importance of the indirect burden, namely, the extent to which the taxation necessary to meet the interest charges may hamper production or curtail necessary social expenditure. He mentions it casually as being one of the questions likely to occupy the attention of the Colwyn Committee. No attempt is made to explore it. In dealing with control over national expenditure (Book V.) Mr. Shirras confines himself exclusively to the methods by which the House of Commons ensures that its appropriations are properly utilised, what one might call "formal control."

Attention might be drawn to a slight blemish in one of the Historical sections. The early history of the English customs and subsidies is a thorny subject to handle, and Mr. Shirras's summary statement (p. 350) that "Tunnage and Poundage were levied from the time of Edward I (1302) for life" might lead students astray.

There are a few small flaws in reasoning. On p. 34 Mr. Shirras says: "Another characteristic of Public Expenditure is its compulsory character," and refers to the Austinian Theory of Sovereignty. But the fact that the State obtains its resources for meeting public expenditure, if necessary, by compulsion belongs appropriately to a discussion, not of "Public *Expenditure*," but of "Public *Revenue*" or "The Public Economy." Public Expenditure may, of course, be called compulsory in the sense that the State is forced to make some provision for National Defence, etc., etc., but this is not what Mr. Shirras means. On

p. 164 Mr. Shirras says: "if the law of Bernoulli be assumed . . . the principle of Minimum Sacrifice leads . . . to somewhat steeply progressive taxation. . . ." But for the principle of Minimum Sacrifice (as Professor Edgeworth has pointed out) it is necessary to assume only what is universally admitted, namely, that utility does not increase *proportionately* to means. In dealing with "Taxation of Surplus" (p. 327), Mr. Shirras says: "It is generally recognised as *fair* to tax that part of an individual's income which is not the result of any useful economic effort on his part, without interfering with production." This is to amalgamate two arguments for the Taxation of Surplus which are essentially distinct—the one is concerned with the equity of such taxation, the other with its effects on production. On p. 331, "The Taxation of Unearned Increment," Mr. Shirras says: "There is nothing unfair in imposing a special tax on an increase of wealth due. . . . to a stroke of good fortune." But the strength (such as it is) of the argument against which Mr. Shirras is contending does not rest on the unfairness of taxing an increase of wealth due to good fortune. It rests on the unfairness of taxing one special form of such increase.

Mr. Shirras is to be congratulated on the successful accomplishment of a task which it must have required no small courage and energy to undertake and no small endurance to carry through. His text-book will certainly supersede any other which has appeared on Public Finance in the English language.

J. LEMBERGER

A National System of Taxation. By A. RAMAIYA, M.A. (Madura. 1924. Pp. 252.)

THE author modestly disclaims the possession of any expert knowledge of economics, finance, or politics, but as regards the first he has evidently made himself familiar with works of authority. After a discussion of the theory of taxation he applies the conclusions to the fiscal problems of India. His sympathies are wholly with those who seek a remedy for existing evils in Socialism. He realises that the carrying out of the full programme is dependent on a great change of moral standards. But he evidently would welcome a rapid advance along a path which India is certainly at present unfitted to tread.

Like Professor Bastable, he first deals with non-tax sources of revenue, but he arrives at widely different conclusions. He is sanguine enough to believe that it is possible for a State " under

wise administration to meet the whole of its outlay" in this way (p. 56). He advocates the gradual expropriation of all land-owners on payment of the market value of their lands. His arguments are unconvincing, and as regards India he does not seem fully to understand the position (p. 4). All rulers of India, including ourselves, have conserved in a very unusual degree the rights of the State in the soil. Imitating its predecessors, the British Government began by claiming nearly the whole (90 per cent.) of the rent. By gradually reducing its claim to 50 per cent. it made subordinate rights in the land valuable. But, except in Bengal and a few other tracts where a permanent settlement was foolishly made, it has never destroyed its own title. It revises its land revenue settlements every thirty years, and thus can secure the advantages the writer claims for State ownership. Theoretically it could again raise the standard of assessment, but whether it should face the unpopularity involved is another question. The State owns the minerals except in tracts under permanent settlement, and has very extensive rights in the forests.

Mr. Ramaiya also advocates a large extension of State and municipal industries. The old bureaucracy managed with fair success posts and railways, the operations of which can be largely standardised, and its successors may do the same. But the former was not, and the latter will be still less, fitted for the superintendence of industrial undertakings. Apart from general objections to municipal trading, its success presupposes a degree of public spirit in the commissioners and integrity in the staff, and a vigilance of public opinion, which are lacking in most Indian towns. In many places it is difficult to get the electors to record their votes.

As regards distribution of taxation, Mr. Ramaiya, starting with the duty of the State to promote the happiness of the greatest number and to exact the minimum of sacrifice, properly lays stress on the law of diminishing returns of satisfaction from increments of wealth after enough has been secured to provide a moderate degree of comfort. He is justified in drawing the conclusion that taxation should be progressive and that the "minimum of subsistence" should be exempted. He quotes Professor Pigou in support of his views on the first, but the passage deals with the effect of a "moderate impost," whereas the author *thinks the State can take 75 per cent. of all surplus income* without quenching the desire to earn. Throughout he pays small regard to the danger of checking the growth of capital and of

willingness to employ wealth in industry. This is natural, as he considers that any ill effect is obviated if the State itself undertakes industrial enterprises (p. 190). The "minimum of subsistence" should be liberally interpreted, but the writer in his remarks overlooks the danger of encouraging extravagant public expenditure, especially in democratic States, by putting the figure too high.

If the State fails to satisfy its needs from non-tax sources it should, in the author's opinion, have recourse first to customs and excise duties, next to death duties, and only in the last resort to income tax. His preference for the first is due to his desire to use taxation for ethical purposes and to a limited extent for the protection of native industries. He values the second as a means of bringing about a better distribution of wealth. "Happiness" in his pages must not be interpreted literally. It includes "good living" and excludes all base and ignoble pleasures, condemned by "the general consensus of opinion." As we shall see, Mr. Ramaiya excludes perfectly innocent sources of enjoyment. Commodities are classified as necessaries and luxuries. Luxuries are either harmless (comforts) or harmful. All necessaries should be untaxed, and Mr. Ramaiya therefore condemns the duties on salt, kerosene, and coarse cotton goods. Comforts should be subject to customs duties in suitable cases to encourage native production. Harmful luxuries should be repressed by customs duties and equivalent excise duties. Degrees are admitted, but, as the duties are repeatedly described as prohibitive, obviously heavy taxation is contemplated. The object is not revenue but the promotion of virtue. The black list includes toys, dogs, fireworks, silk goods, tobacco, and even tea and coffee (p. 163). But on p. 169 the last two are mercifully transferred to the comforts list. If export duties are levied on food and the raw products of industry they should, the author thinks, embrace all agricultural produce in order to make the home supply cheap and to prevent any harmful diversion of labour from one crop to another. Mr. Ramaiya does not explain what the effect would be on the foreign trade of India, which depends on large exports of these commodities. Those agriculturists who have any surplus to sell will not welcome his suggestion.

We need not linger over his advocacy of death duties. They are unknown in India at present, and would be intensely unpopular. They would involve inquisitorial inquiries in a country where the privacy of the home is jealously guarded,

where evasion would be very easy, and where successful attempts to corrupt the assessing staff would be common.

Mr. Ramaiya criticises the exemption from the Indian income tax of incomes from agricultural land above the minimum (Rs. 2000, or £133) which is free from assessment. The levy of the tax would be perfectly just, but it would be difficult to convince landowners that the revenue they pay is rent, and not a tax on rents. In India the super-tax is pretty severe, ranging from $\frac{1}{16}$th to $\frac{3}{8}$ths, but it only begins to operate when the income exceeds Rs. 50,000. Mr. Ramaiya's proposed scale is much more severe, rising as it does to $\frac{5}{8}$ths on incomes exceeding 5 lakhs (£33,333), which with ordinary income tax would pay about 75 per cent. What is perhaps more serious, the ordinary tax would be levied at $\frac{1}{8}$th and incomes of Rs. 7000 (£466) and upwards would pay super-tax at rates varying from $\frac{1}{16}$th to $\frac{10}{16}$ths.

Mr. Ramaiya has written an interesting book; but one will be surprised if his proposals commend themselves to the Indian Taxation Inquiry Committee now sitting at Delhi.

J. M. DOUIE

Das Papiergeld der französischen Revolution, 1789—1797. By S. A. FALKNER, Professor of Economics at the University of Moscow. (München and Leipzig: Duncker und Humblot. 1924. Pp. 121.)

La Monnaie et les Phénomènes monétaires contemporains. By BERTRAND NOGARO, Professor of Law at the University of Paris. (Marcel Giard. 1924. Pp. 322. 25 frs.)

THE task of educating public opinion and of preaching a gospel of financial sanity in the Russian Soviet State during the years immediately following the war might be expected to involve some delicacy and diplomacy of treatment. It appears that in 1919 Professor Falkner set himself such a task in the sphere of monetary reform, and accordingly chose as his theme the monetary policy of France during the period of the Revolution. With the aid of this interesting historical subject and a purely descriptive treatment, he has made an effective disquisition, which must have contributed materially in his country to the general understanding of the principles of finance.

The original edition of some 350 pages, published in Moscow in 1919, has been translated into German by Friedrich Schlömer and has been reproduced under the title quoted above, in abridged form, as one of the publications of the *Verein für Sozialpolitik* in a

series specially devoted to the history of monetary stabilisation. This German edition contains a purely objective study of monetary conditions during the period discussed and leads to no explicit conclusions other than those which are evident from the description itself. Following the theoretical examination of different systems of issuing money, an account is given of the initial emission of assignats and of the gradual process whereby they depreciated and became ultimately valueless. The causes of the depreciation and its effects on industrial and social life, matters which are unfortunately better understood now from the current experience of numerous other countries, are discussed and illustrated. The brochure contains useful statistical tables dealing with the issue and gradual depreciation of the assignat and includes a bibliography of historical and recent works on the subject.

Professor Nogaro, in attempting a similar task under the title, *La Monnaie et les Phénomènes monétaires contemporains*, draws his evidence from a considerably wider field. The descriptive portion of the book is divided into four parts, corresponding with four phases in the development of international monetary policy. The opening sections of this historical survey deal with the first three quarters of the nineteenth century, when European countries were making experiments in bimetallism. The second period, beginning in 1873, shows the breakdown of bimetallism, accompanied by serious monetary disturbances due to the depreciation of silver. A third stage then emerges, some twenty years later, with the development in various countries of the gold exchange standard, which provided a means of escape, for such countries as India, from the evils of the silver standard. The abandonment of gold, from 1914 onwards, constitutes the fourth and final stage in the description.

From the historical standpoint the book thus holds much of interest for all students of monetary phenomena. The theoretical treatment which follows is perhaps more open to criticism; for Professor Nogaro spends a considerable proportion of his argument in slaying the slain : the unqualified statement that money, being a commodity, must vary in value in inverse proportion to its supply. This formula is styled the "classical" Quantity Theory of Money, and is held up to ridicule throughout the book. However, in spite of the object of attack being hardly worthy of the author's prowess, he has nevertheless added considerable force to the arguments of an important group of French economists, comprising amongst their number Aftalion, Rist and Guyot, who

tend to discount the purchasing power parity theory of exchange rates, and consider that the price level is rather the resultant of the exchange rate itself than *vice versa.*

The first step in this argument is to show a remarkable lack of correlation between the respective movements of the price level and of the volume of notes in circulation. Numerous examples are quoted by Professor Nogaro, both from pre-war and more recent experience. In particular, the disparity between the movements of the price level and the note issue in Germany during and after the period of inflation is instanced. From such cases it may be inferred that the Quantity Theory is to be discredited, and that the movement of the price level must be governed by some factor other than currency policy.

The second step is to show the very close relationship between movements of the exchange rate and the price level, the former almost invariably preceding slightly, and therefore, presumably, being the cause and not the effect. Professor Nogaro adds support to this on theoretical grounds, noting that under the non-metallic regime the exchange rate is free to fluctuate between very wide limits, and is affected by speculative considerations based on political and other developments independent of price movements. Not only is the exchange rate thus the resultant of independent factors but, being so determined, is itself a cause affecting the internal level of prices. By stimulating or restraining exports and by determining the price which must be paid for imports, the exchange rate has a considerable influence on home prices.

This makes a strong case; and it has been ably expounded by the author. The weakness lies only in the first step. By concentrating attention on the note issue, and its lack of relation to the price level, Professor Nogaro is enabled to disregard entirely the two principal points of the proponents of monetary stabilisation, namely, that the regulation of prices can only be directly effected through the control of credit; and that it is the control of the *use* of credit, rather than its volume, which is effected through changes in the discount rate.

Nevertheless, however little agreement may be felt on such theoretical issues, the practical conclusion of the book contains a principle to which a very large majority would add their assent. It is suggested that France would be wise to bring into operation a gold exchange standard, and should fix the gold value of the new monetary unit provisionally in accordance with the existing rate of exchange with the dollar. In other words, a new buying and selling price for gold would be established by the Bank

of France, and the import and export of the metal would be freed. Gold would not be restored to circulation. This much we endorse, except the word "provisionally." The author points out, in his conclusion, that the policy he proposes need not prevent any future attempt to raise the franc gradually towards its pre-war parity. One fully appreciates the diplomatic reasons for his introducing such a suggestion. But if it were adopted, it would menace the success of the whole scheme. It would deprive the new criterion of any element of "sanctity." By recognising a policy of deflation it would weaken the case against slight inflation. And whilst enabling exchange stability to be secured over short periods of time it would leave the long-period movement, both of the exchange rate and of prices, entirely to chance, since they would be ruled in neither case by a precise policy.

Despite such minor points of possible weakness, the treatment of the subject is on the whole courageous, and the conclusions would seem to merit the attention of the Bank of France.

J. R. BELLERBY

The London Money Market. A practical guide to what it is, where it is, and the operations conducted in it. By W. F. SPALDING. (Sir Isaac Pitman & Sons. 1924. Pp. xix + 221. 10*s.* 6*d.*)

THE publication of a third edition of this survey of the London money market is of itself sufficient tribute to the intrinsic worth of the work; we can only add that it is the more valuable in that it appears opportunely, at a moment when monetary mechanism and policy are in a state of flux. In order to determine what the future may hold it is essential to know what lies behind. This task of showing the paths by which the present monetary situation has been reached is well accomplished by the author of *The London Money Market.*

The work should gain much popularity with the student. From his point of view it has the quality of assisting the imagination. It pictures each separate situation not, as is so frequently done, as a dry, static condition, but builds it up from its early and simple beginnings, through all the fascinating stages of evolution, until the final development remains stamped on the reader's mind as a living system. In this way the author treats successively the banking system as a whole, its centrepiece, the Bank of England, the Bankers' Clearing House, numerous instruments of exchange such as the promissory note, the bill of exchange and the Treasury bill, and passes finally from this back-

ground of history and description to the discussion of the intricate monetary problems raised by the cataclysm of the war.

It is inevitable that questions such as the effectiveness of the bank rate and the influence of the Treasury bill in the money market should form important features of a survey of this character. Referring to the device sometimes adopted by the Bank of England for making its rate more effective in the market, namely, "to sell Consols for cash and to buy them back for the 'account,'" the author states that the Bank has had little occasion for resorting to this system since the war. This seems somewhat surprising in view of the emphasis recently given to this system of selling securities or other assets with a view to strengthening the influence of the bank rate over the market rate. However, the author supports his statement on the grounds that the effectiveness of the rate has been assisted by "a whole host of restrictive measures" since the war. One wonders whether a further important factor in the situation may not have been that the Bank, being no longer troubled with the need for keeping strict watch over the gold situation, has not been vitally concerned to make its rate immediately effective, and has therefore not been obliged to apply severe measures.

A further point of interest arises out of the statement that, "If the Clearing Banks chose to break away from bank rate in fixing their deposit rates they could defeat the Bank of England so long as they could get currency notes." Which of these two links is then the more important, the automatic movement of the deposit rate in conformity with the bank rate, or the control over the note issue? Presumably the link through the deposit rate imparts greater strength to the influence of the central rate over the market rate, but since it does not exist in certain countries, where there is nevertheless efficient control, it cannot be regarded as indispensable. As regards the control of the note issue, there arises the question, much debated, whether the ability of the joint stocks banks to procure notes from the Treasury merely by allowing Treasury bills to mature, does not potentially destroy control over the cash basis of the banks. Mr. Spalding indicates, however, that the existence of the Treasury bill, although apparently a source of weakness, may be used to give considerable strength to the mechanism of control. "For one thing, sales of the British Government's Treasury bills in recent days have been a ready and effective means of absorbing any surplus funds that might be on the market, and it would be a simple matter to keep the money exchanged in return for these bills off the market for

a time if circumstances warranted it." It would seem fairly clear, in fact, that it is always within the power of the Treasury to draw money from the market by the sale of bills just as rapidly as the banks are able to draw cash from the Treasury by allowing bills to run out.

The book closes with a stirring account of the financial panic extending throughout Europe at the outbreak of the war, and explains the considered measures whereby the London bankers were able to stay the confusion and protect their gold reserves. According to this vivid portrayal, so vital a factor was the protection of gold at every stage, that one begins to wonder whether there would have been any panic at all in Europe if there had been no gold. In any event the measures described as having succeeded in allaying the fears of the public purported almost exclusively to demonstrate that gold was not essential to the system, and that even if it were, for the time being it would not be available. The lesson which seems evident from the survey is that gold should never again be allowed to obsess the public mind, and that when the gold standard is once more in operation, the circulation of gold should be avoided, the note issue should be independent of the gold supply, and the recognised limits of fluctuation of the reserve ratio should be very wide.

Such conclusions Mr. Spalding leaves for others to deduce. And if any criticism might be made of the book, it would relate rather to the attitude of an author who, having comprehensive knowledge, refrains from showing the constructive value of that knowledge. Hardly anywhere is there a proposal for future development or modification. The answer to such a criticism lies in the nature of the book itself, which maintains throughout a skilful uniformity of descriptive treatment; nevertheless, when a writer has the ability to whet the appetite for information, he should in justice proceed to satisfy it as fully as in him lies.

J. R. BELLERBY

Unemployment: A Study of Causes, Palliatives and Remedies. By W. A. APPLETON, C.B.E., with a Foreword by LORD ASKWITH, K.C.B. (London: Hodder and Stoughton. 1924. Pp. 153. 1s. net.)

Unemployment: its Cause and Cure. By ALFRED HOOK; and *The Workers' Share.* By ALFRED HOOK. (London: The Labour Publishing Company. 1924. Pp. 214, and viii+124.)

THE authors of these books look at the subject of Unemployment from different points of view. Mr. Appleton, as the Fore-

word indicates, adopts generally the individualist outlook, and sees the problem primarily as one of production, and of so adjusting conditions as to stimulate enterprise to a maximum. Mr. Hook, on the contrary, envisages it as to a great extent a problem of distribution. His book on *The Workers' Share*, which is of a general character, deals with the question of so adjusting the arrangements of society as to provide the workers with a satisfactory standard of living, based upon Mr. Seebohm Rowntree's efficiency standard. In *Unemployment* the author attaches great importance to unproductive labour in its bearing on unemployment. "The vital problem," he says, "cannot be seen in all its aspects unless all the implications of unproductive work are taken into consideration." The primary problem, he argues, is one of individual maintenance and so depends upon "the combined question of production and distribution."

Mr. Hook's two books appear to be part of a series dealing with a variety of social problems, and he himself has already produced others of a similar type. *The Workers' Share* is the more general, attempting, by an analysis of the existing system, to consider the possibility of providing an adequate general standard of living, and to suggest means of so utilising the national resources as to bring this about. The author concludes that such a redistribution is possible through the regrouping of the labour supply, and the transfer of workers, mainly from commercial, distributive and domestic employment, to the increased production of those goods and services which will provide what is necessary to secure the desired improvements. At times, indeed, his treatment curiously recalls some of the illustrations given by J. S. Mill of the effects of turning non-capital into capital, though the underlying motive is altogether different. The book shows wide knowledge, and the author has clearly covered considerable ground in his economic reading. His treatment of such subjects as Co-operation and Profit-sharing is interesting, and he applies his proposals to various branches of industry and production —transport, the export trade, and the home market. The author does not overlook the question of human nature, but rests his hopes upon the prospect that, with a gradual development, the motive of service will be able more than to replace the acquisitive instinct. At the same time it is not clear that he altogether realises the difficulties in the way, or the possibility that the destruction of acquired standards may produce serious hardships. The book on *Unemployment* is based on similar general ideas, and appears to cover a wide ground. It would, perhaps, have been better to have kept it distinct from the problem of unproductive

labour, whilst in some respects, as in dealing with the effects of machinery, the author does not appear to allow enough for the gradualness of much economic change.

The two books together are interesting as showing a serious attempt by the socialistic school to work out a detailed scheme for the application of socialistic ideas. The author shows in many ways a real attempt to understand the position of the other side; and his analysis of the different attitudes adopted by opponents of labour is interesting. Sometimes the attempt breaks down, however, as where he describes certain sayings of Adam Smith as "the statement of a mere time-server or of one so profoundly convinced of the virtues of the pursuit of self-interest that he must suppress any reference to its manifest evils at whatever sacrifice of truth and humanity." Again, there are times when Mr. Hook appears to put too much confidence in the mathematical basis of redistribution and to allow insufficiently for the human element. But when all is said he does at least give the idea that he has worked out his conclusions for himself and that, right or wrong, they are indubitably his own.

In this respect Mr. Appleton's book is disappointing. For one very seldom feels that one is really getting the author's own ideas and experiences. Some of his book looks like a résumé of what has already been written on the theory of unemployment, which he does not always appear to have fully assimilated, and much of it seems to consist of arguments culled from journalistic references to the subject. This is the more disappointing, as on the few occasions upon which he gives us what appear to be his own personal experiences, his writing is far more convincing. The result is to reduce seriously the value of his book as a contribution to the subject. His analysis of causes has already been done better by other writers, and the same may be said of his arguments on the system of insurance by industries. Much of the book, moreover, is simply composed of commonplaces of what may be called the Anti-Waste School.

Generally speaking, one cannot help feeling that he has missed his opportunity. A Trade Union leader of some standing, and occupying a position of some independence, his description of his own experiences would have been of great value, and he could have done much in the rôle of the candid critic. Unfortunately he has preferred apparently to rely mostly on material already provided by others, often of an inferior type, which has not allowed him to produce work of a quality, of which the more personal references in the book suggest him to be capable.

N. B. DEARLE

The Agricultural Crisis, 1920–23. By R. R. ENFIELD. (Longmans. 10*s*. 6*d*. net.)

THE farmer who picks up this book in the expectation of finding something to help him through a difficult time will receive a considerable shock. This is not primarily a book about agriculture; rather does Mr. Enfield use the example afforded by fluctuations in the prices of agricultural commodities for a consideration of the causes of the rise and fall of commodity prices in general.

Mr. Enfield's study begins with the few years preceding the war, and he is led to conclude that the rise in prices up to 1920 and their subsequent collapse were due, in no way, to scarcity in the former case and over-production in the latter; that which determined them was the monetary policies of the principal countries. The rise and fall were universal, not limited to this or that country; they were out of all proportion to costs; the factor of inflation introduced by war finance influenced only the degree of fluctuation; credit expansion involving instability in the general price level can take place at any time. The author admits that in the case of individual commodities scarcity or abundance will go a long way towards explaining a rise or fall in prices, but these causes will not explain the alteration in the general price level, as it is unlikely that all commodities will experience simultaneously abundance or scarcity. Thus, by manipulation of discount rates he considers that much more can be done to stabilise industry, and this is the object he has in view. "The sensitiveness of business to an alteration in the bank rate is a matter of experience, and it is not necessary to accept the Quantity Theory of money, or any other economic theory, to know that restriction of credit has in practice a definite effect on the course of business activity. What is necessary is a different use of the instrument . . ." (p. 147).

From the stabilisation of money Mr. Enfield passes on to consider the stabilisation of agriculture. It is the instability of prices that distinguishes agriculture in particular from other industries, and if the want of confidence which the uncertainty induces could be removed, the industry would receive an impetus which nothing else could give in equal degree. The subject is being studied, particularly in the United States, and in this country Mr. E. M. H. Lloyd has given a lead to the wider application of the principle in his book on *Stabilisation*. His proposal as regards wheat, for example, is the re-establishment as a part

of our normal administrative system of the emergency machinery of the Wheat Commission set going during the war. The problem of the elimination of the private trader by the substitution of one purchasing authority is as much one of practical administration as of economic advantage, and it is here that Mr. Enfield, and Mr. Lloyd before him, seem to invite challenge. As a theory or an ideal the notion of a National Purchasing Board will find favour with many, but much more work must be done on it before the question of " How is it to be worked ? " can be answered.

Still, many people are looking that way. The Rt. Hon. S. M. Bruce in his speech to the Imperial Economic Conference in 1923 made similar proposals regarding meat, but the general opinion was that it would involve not only State purchase but also State marketing. Mr. Enfield's book is an important contribution to the proper understanding of the problem, and it deserves careful consideration by those who are engaged in the study of the difficult problem of trade fluctuations.

C. S. Orwin

International Labour Office: Studies and Reports. Series D (Wages and Hours), No. 13, " Family Allowances." (Geneva, 1924. Pp. 186. Price 3s.)

Traditionally, we are inclined to regard the experience of " foreigners," in matters of social legislation, with a tolerant aloofness; as Lady Adela put it, they are " only the natives," and what they choose to do has little relevance for us. But the comparative studies for which the I. L. O. is making itself responsible are helping to knock the stuffing of insularity out of us. The Office—in conjunction with the University of Chicago—has now produced an admirable survey of the progress which different countries have so far made in a matter which is very much " in the air " over here. Its report is compact, readable, and—we have every reason to believe—accurate.

The largest section, as might have been expected, is that devoted to France, where the number of workers who have been brought within the scope of equalisation funds is approaching its second million. The character and scale of allowances, and the methods of distribution employed, are here summarised, and some attempt is made to present the (conflicting) opinions of representative industrialists as to the value of the funds. The experience of Belgium, Holland and Germany is also of much interest. In Germany, it is " impossible to forecast the future of

family allowances." During a period of fiscal chaos, the line of least resistance has prescribed the employment of this method of wage-adjustment, among others, but it seems to be little liked by the Trade Unions. The closing section of the Report deals with Australia, where, contrary to what seems to be a widespread impression, very little in the direction of family endowment has actually been attempted.

Reports of this kind, in our post-war world of fluctuating values, are very soon out of date. If the I. L. O. can keep us posted as to the progress of the experiments which are the subject-matter of this one, the interest and appreciation of their English subscribers will certainly not be lacking.

H. PHILLIPS.

The A B C of the Foreign Exchanges. By GEORGE CLARE. Sixth edition, revised, with additions by Norman Crump. (London: Macmillan & Co. 1924. Pp. xviii + 224. 4*s.* 6*d.*)

THE present reviewer, confronted with this "revised" edition, was reminded, that, more than thirty years ago, he had dealt in the JOURNAL (Vol. III, p. 487) with the original issue. During this wide interval he has frequently recommended the book to pupils, and has now nothing to take from, but would wish, if it were possible, to add to, the praise he then bestowed. As a teacher he has always felt that the foreign exchanges, the best test, in his belief, born of large and long experience, of an examinee's grip of economic science, could be approached without alarm as one application of the general principles of value, the commodity being bills, or acknowledgments of debt, and the governing force at work, in supply and demand, being the amount of indebtedness, however incurred, existing at the moment. This central idea, once got, the complexities of translation of one money into another, and the added refinements brought by convertibility, or the reverse, of paper, by differing rates of interest, or degrees of worth or lengths of currency of bills, and by various origins and diverse kinds of indebtedness, could be faced and overcome. Mr. Clare's clear, terse, pointed, "practical guide" seemed to him, then as now, an admirable exemplar of the fit mode of handling and resolving these conundrums of the money market. It was, he thought, and the sequel has reinforced his verdict, suited both for the plain business man or ordinary citizen and for academic students, whether tyros or those more expert or trained.

He is glad to find that the capable manipulator of this enriched account, who joins a proper appreciation of economic theory to an intimate command of concrete motive and actual result, has felt it necessary to make "comparatively little" change in the original text. "The addition of a few words here, the deletion or modification of a paragraph there," are, he remarks, "sufficient to bridge the gap." This skilled work, nevertheless, has been executed with punctilious pains. We are also not sorry to discover that Mr. Crump himself regards the apparent *bouleversement* of the last few years in a conservative spirit, as tending to confirm rather than displace the fundamental bases of the past. It would, no doubt, and here we may perhaps go a little further than he is ready to advance, be obscurantist stubbornness to ignore the moral enforced by such fresh developments as the gold-exchange standard, with its unanticipated prolongation, and extension, of success, in spite of temporary failure to withstand abnormal strain. The conception, too, of "purchasing power parity," which has had the advantage, and perhaps also the disadvantage, of resounding advertisement by eminent authority, has, we should allow with Mr. Crump, served to illuminate, more satisfactorily, it may be, from the standpoint of theory than that of practice, the bewildering, ever-fluctuating, continuously erratic, movements of international voyaging by means of vessels loosed from the steadying anchorage of the free import and export of gold. But we are none the less sincerely grateful to the cool sanity and just discretion with which, in the fresh chapters embodying the happenings of the war and after, our competent reviser has reduced the startling and the passing to their right proportions and their proper scope in time as well as space, and interpreted the unprecedented and capricious by reference to an underlying and established order. He has thus, we believe, acted well.

He has, moreover, so we judge, deftly contrived to summarise the pros and cons in some vexed debates by a few judicious and judicial observations. While he has dealt perforce concisely with "war-time finance," he appears to us to hit the point exactly, for instance, in such matters as the relation of the issue of currency notes to the rise of prices, and, in the more special sphere of the foreign exchanges themselves, we would commend unreservedly his penetrating analysis of the present significance of the New York exchange. His forecast on the degree of approach of sterling to gold was, he frankly allows, an imprudent essay, and even since he wrote the later footnote, commenting

on an earlier statement in his text, the turn of fact has been further modified. But it has already become a real cause for assured congratulation, he shows, that New York has not, as many predicted, wrested the pre-eminence in the money market of the world from London, even if Amsterdam owes to the fortune of the war and after increased opportunity for reaping the gain accruing from settlement of monetary dealing and exchange business by her own skilled financiers. This last is one of the curious new facts brought out in this authoritative and attractive narrative, which should now, we suggest, be embellished with the welcome, if not requisite, appendage of an index.

L. L. PRICE

Report of the Fifty-Sixth (1924) *Co-operative Congress.* Edited by A. WHITEHEAD. (Co-operative Union, Manchester. Pp. 653.)

THIS volume combines the latest statistical information concerning the present position of the Co-operative Movement in Great Britain and Ireland, with reports of the work of the various sections during the year and the discussions at the Congress at Nottingham. Prepared mainly for propaganda purposes within the movement, it none the less contains matters of considerable interest to the general student of Economics. Excluding the Agricultural, Dairy and other special Societies in Ireland which are not dealt with in this volume, there were, at the end of 1923, 1441 Societies of various kinds. These had a membership of 4,618,819, a share capital of £84,242,126 and loans to the value of £42,661,757, and reserves amounting to £11,904,581, whilst the sales for the year amounted to £258,449,666. The net profit was £17,521,001. There appears to have been a tendency for the increases in membership to slow down in recent years, in fact in 1922 there was an actual decrease in the number of members; this, however, was more than made good in 1923. It is noteworthy that the average amount of share capital per member is small. In the case of the Retail Societies it works out at about £16 each, and has been almost stationary for some time at this average. This suggests that on the whole it is as consumers rather than capitalists that people are attracted. Capital savings must for the most part be invested elsewhere, probably in Building Societies, Government Saving Certificates and such-like directions. In the case of loan capital the average per member in the Retail Societies at between £2 and £3 is quite

small. The figures covering the farming operations by the various Retail Societies show that profits have been few and far between. They amount to £3601, whilst the losses total £209,681. The acreage farmed by all the Societies was 66,447.

Interesting statistics are given showing the value of output per worker and the wages cost per £ of production, and distribution in the English and Scottish Wholesale Societies. Taking the high-water mark of 1920, we find that the value of each productive worker's output was £1057, whilst in 1923 it was £706. In the same period the wages cost per £ of production had risen from 33·52 to 40·88.

At the Congress an interesting discussion took place on the deadlock which has arisen between the Co-operative and the Trade Union Movements concerning the adjustment of wages and conditions of labour within the Co-operative Movement. The chief difficulty appears to be that Co-operators claim that "where Trade Union agreements (either national or district) have been made by representative bodies of employers and workers, the same rates should apply to Co-operative employees employed in the area covered by the agreement." This the Trade Unions are reluctant to agree to, as they appear to want the right to demand something better from Co-operators than from others. The struggle emphasises under interesting conditions the economic conflict between consumer and producer. The Co-operative Consumers' Movement is the workman and his wife organised to get the best value for wages spent. The Trade Union Movement is the worker without his wife organised to get the highest wage possible in his own trade. It would seem that if the Co-operative Movement is compelled to pay substantially higher wages than others fulfilling the same functions, it must either get better value from the worker or give worse value to its Co-operative purchaser. One speaker in the discussion at the Congress sought to show that the two Movements worked with different weapons. He said that the Trade Unions "with the sword of the strike have fought many gruesome fights," but the Co-operative Movement was a "constructive one." "It used not the sword but the trowel." "What a foolish man he would be if he thought to build with a sword or fight with a trowel." The development of this difference in outlook between the two Movements will be watched with interest by economic students.

Henry Vivian

Agricultural Co-operation in Western Canada. By W. A. Mackintosh, M.A., Ph.D., Queen's University, Kingston, Canada. Pp. 156.

This volume, one of the Queen's University Studies, does not deal with the whole field of co-operative activities in Western Canada, but is limited to an investigation of co-operative marketing and purchasing in the three provinces of Manitoba, Saskatchewan and Alberta. It was the reviewer's privilege to be brought into touch with the active spirits in the early days of the movement during a visit to Western Canada in 1909. The developments since then have indeed been remarkable. There are now powerful Associations for dealing with Grain, Live-stock, Creameries and Wool. The Grain Associations are, as might be expected, the largest. The volume gives interesting details of the obstacles which have been overcome and records the failures and mistakes made during the experimental period.

It is interesting to note that it was the decline of competition, coupled with the growth of co-operative action, amongst those previously handling and disposing of the products which impelled the farmers to co-operate for marketing purposes. In European countries co-operation has been the complement of Small-scale Farming. In Western Canada the farm or business unit is large, and one product, wheat, overshadows all others. From about nine million bushels in 1901 the exports of wheat rose to 100 millions in 1916. The Farmers' Co-operative Companies have handled in recent years some 30 per cent. of the total grain inspected in the Western Inspection District. Some criticism appears to have taken place as to the genuineness of the co-operative character of these organisations. "To be effective and to survive rather than to be unspotted but impotent in the pure orthodoxy of the co-operative gospel" has, it is claimed, been the aim rather than "to measure up to the yardstick of the Rochdale system." It seems clear that "to survive" is normally one of the conditions of being useful in this world, but it is difficult to see why the Rochdale "yardstick" should be thought of as a standard of measurement. The "Rochdale" system of co-operation has developed into a purely consumers' organisation under which any trading or manufacturing surplus is allocated in proportion to purchases for consumption. The object of co-operation in the grain, cattle and wool trades in Canada is declared to be the "increase of the producers' price brought about by the paring down of the margin absorbed by

marketing agencies." As the Rochdale system thrives on this marketing "margin," its "yardstick" seems quite out of place.

Whilst the benefits of co-operative organisation amongst Canadian farmers have been considerable, experience has shown that the "plunder" of the "middlemen" is nothing like so large as it was thought to be. Indeed the discovery of this has been one of the gains of these co-operative enterprises. So long as large numbers of people associated with a particular interest are convinced that their failure to become wealthy is due to their being unjustly exploited by other interests, discontent and misdirected energy results. The "Association of farmers who unite in an effort to handle their common interests through an agency which is controlled by them" opens up avenues of experience and information which had hitherto been closed and leads to the formation of sounder opinions. Canadian farmers, who in 1900 knew little or nothing about the marketing of their grain, in 1924 control two of the largest exporting companies on the American continent. The "middlemen" have been impelled by the competition of the farmers' co-operative companies to serve more efficiently the farmers whose products they handle. Canadian farmers, through the more intimate and direct contact with world market conditions, have come to realise that there was room for improvement at the producers' end in the quality and the grading of grain, live-stock, wool and butter. He may have been told this before by "middlemen," but it did not lead to effective action. He is now told so by the representatives of his own organisations, and as his failure to act would jeopardise the co-operative enterprise in which he and his fellow-farmers have invested money, the pressure becomes operative.

After making all allowance for the difference in conditions between European countries and Western Canada, there are many lessons to be learned from the remarkable development of agricultural co-operation with which this study deals.

HENRY VIVIAN

La Vie Économique et les Classes Sociales en France au xviii^e Siècle. By HENRI SÉE. (Paris: Alcan. 1924. Pp. 231. 15*fr.*)

THE International Historical Congress at Brussels in 1923 had the good result of opening the eyes of some of us to the remarkable activity in recent years of French scholars in the direction of research in economic history. The scholarship of the

École des Chartes, the growth of the profession of archivist, the revival of interest in things local which has naturally followed upon the grant of autonomy to the provincial universities, and the more critical attitude towards the Ancien Régime and the Revolution which has come with the passage of time—these influences, combined with the circumambient pressure of the social question on thoughtful minds, have led to the appearance in France of a stream of specialist monographs on particular topics and on particular localities. Their authors, I suppose, are mostly "historians," not "economists," by profession; and this may have great advantages. They are the more likely, one would think, to let the ascertained facts occasion their generalisations, and not to allow theoretical prepossessions to select the facts to be commented on. But it must be confessed that the severely scholarly historical interest has its dangers too. Meticulous accuracy in the transcription of documents may become an end in itself; and the traveller may fail to see the wood on account of the trees.

For "original research" there will be abundant need for many decades to come; it is work for which we must be grateful; and every professional teacher of history (might I add of economics also ?) would be the better for having done at some time a bit of investigation into crude actualities. But the world also needs, and in a sense needs even more, the scholar who will come along from time to time and disentangle and exhibit and explain what the researchers have found.

This, in the book before us, is one of the services rendered by the veteran scholar, until recently Professor at Rennes. M. Sée, of course, has himself spent long years on the archives of his own province and he is an authority of the first importance on its agrarian history. And to the making of this modest little volume has evidently gone a great deal of labour in the national archives. But what must also impress the reader is M. Sée's command of the large literature of recent local research. Fortunately, with the new standards of exactitude he combines the older French gifts of *ordonnance* and lucidity. The result is a book which is quite unusually instructive and stimulating.

In the first and, I think, most valuable part of the book, M. Sée inquires into the agricultural policy of the French Government during the last thirty years or so of the Ancien Régime, and into its positive results. The nature of that policy is well known. It was on the same lines as the contemporary movement in England which we associate with a name like Arthur Young; with the

additional momentum, as it might seem at the time, that it was forwarded and assisted by a Government which was still regarded as autocratic. Agricultural societies were called into existence by the Government in Paris and in most of the administrative districts (*généralités*) of the country. Edicts were issued authorising enclosure, in order to put an end to rights of common on arable and meadow, and to the practice, in many areas, of intercommoning. Other edicts authorised the division of commons. And, more immediately feasible in some ways, the bringing of moors or marshes into cultivation was encouraged by exemption from taxation.

But all these measures had on the whole very little effect. Certainly the face of the country was far less changed in France than it was in England during this period. M. Sée's careful examination of the forces of opposition, and his narrative of remonstrance and resistance from the peasants in province after province may usefully be placed by the side of the accounts given of the contemporary English movement by Mr. and Mrs. Hammond and by Professor Gonner. The English writers differ in their estimate of the effects of the transformation; but they do not differ as to whether a transformation did indeed take place or as to the forces which really dominated.

M. Sée's main explanation of the comparatively small extent of the actual changes in France is found, first, in the relative scarcity of farming capital, and secondly in the firm root which the peasantry in France, and especially the poorer peasantry, still had in the soil. He would be the first to allow that these are not ultimate answers—if indeed any answer is ultimate!

The second half of the book is devoted to the subject of Social Classes in France from three points of view. M. Sée asks why it was that "the labour question did not arise in 1789"; and of course his answer is found in the contemporary organisation of industry. He then turns to consider the part which the middle classes of Brittany played in the Revolution; and he illustrates the prominence of the lawyers by an analysis, based on tax assessments, of the population of Rennes. In a final chapter he attributes to Turgot the conception, which, whether true or not, has been and is of profound influence, of social "classes" as based on the possession or non-possession of capital. The ascription seems reasonable: I should prefer not to commit myself further.

Until quite recent years, economic history has been the peculiar field of German scholars; and we in England would be ungrateful if we did not acknowledge what they have done to illuminate the

history of their own land, and, both directly and indirectly, of our country also. But the entry of French scholars into the same field is certainly to be welcomed. They will make their own history more intelligible; and even if they do not—as I hope they will—follow M. Mantoux's example and invade our territory, the mere comparison of their results for France with what we think we know of England is sure to be of service. Those in this country who do not know what French scholars are doing can hardly make a better beginning than with the book of M. Sée.

WM. ASHLEY

Heiliges Geld: eine historiche Untersuchung über den Sakralen Ursprung des Geldes. By BERNHARD LAUM. (Tübingen: Mohr. 1924. Pp. xii + 164.)

THIS book is mostly about the ox, and his significance in early cultus and magic. The earliest form of "money" among many peoples, especially in the Eastern Mediterranean, was the ox: that was the first general measure of value. Now, why was that so? Because, say the economists, it was the general "medium of exchange." "In the rude ages of society," remarks Adam Smith, "cattle are said to have been the common instrument of commerce." With his dry humour, he goes on: "though they must have been a most inconvenient one." He does not see whither this sage reflection could lead him; and if he had seen, he would not have minded.

Now comes Bernhard Laum and emphatically reiterates the "inconvenience" of an ox as a medium of exchange. In the Homeric Age, he declares further, there is no evidence for any such actual chaffering of oxen as would cause them to become the ordinary medium of trade. Oxen, he asserts, with a wealth of evidence, chiefly Greek, first came to be specially valued because they were *par excellence* desirable offerings to the gods: and it was in that connection that men first began to reckon in them. His readers will agree, I think, that he abundantly proves that the sacrificial use of cattle was one of the main causes of their employment as "money." Where, I think, he tends to lose himself in vagueness is in his attempt to explain away all supposed economic reasons why cattle should be so highly esteemed by men as to be offered to the gods. In one place he seems to suggest that the gods were thought of as bulls and cows, and *therefore* bulls and cows were offered to them; and a good deal of the learning that has recently been accumulated about

the primitive meaning of sacrifice can then be worked in. But why were the gods conceived of as bulls and cows?

The transition from the use of cattle in sacrifice to the practice of reckoning in cattle in commercial transactions, Mr. Laum sees beginning in the primitive practice of allowing the priest to receive his professional fee in the form of a portion of the slaughtered cattle: a "fee" in the most philological sense of the term. And metallic coin he explains as being originally a mere substitute for cattle or other offerings in kind. Metal—gold, silver, copper—was used for the purpose because it was first highly esteemed by men as material for personal ornaments; and ornaments were originally magical devices to ward off the enmity or attract the favour of the gods. Gold was useful for this purpose because it was bright as the sun, and silver because it suggested the moon; and the relative values of the two were simply the relation between the sun's periodicity and the moon's. Even the function of paper money now finds its true explanation; for "in magic there is no difference between an object and its imitation"!

Mr. Laum's book is a work of acuteness and of industry in several fields; and it has the merit of really contributing a new and important idea. But one could wish that the new doctrine were not quite so rigidly held. Why need we suppose only one origin for so many-sided a thing as "money"? But that is perhaps the way in which knowledge progresses—especially in Germany.

WM. ASHLEY

South Wales and the March, 1284–1415. By WILLIAM REES, M.A., D.Sc. (Oxford University Press. 1924. Pp. xvi + 303. 15*s*.)

IN its sub-title this work is described as "a social and agrarian study," but it is to the human element rather than to the agricultural practices of the district and the period that the author has devoted most attention. This is perfectly acceptable, for, apart from the material being less abundant, so many factors, some natural and generally stable (climate, soil, altitude), others artificial and varying in incidence (disease, prices, weights and measures), have to be taken into account when investigating the early agricultural history of a district, that none will cavil at preferential treatment being accorded the social side of this thesis. Thus, such larger questions as the conquest of Wales, feudalism

in the March, the liberty and duties of the subject, local administration and systems of land-tenure predominate, their careful and exhaustive treatment calling for close attention on the part of all students of Seebohm, Vinogradoff and similar authorities. Space is lacking adequately to effect comparison with the social conditions existing at a similar period elsewhere in this country, but it may safely be said that valuable material has been brought to light—material which can with advantage be placed side by side with records already published relating to other parts of Great Britain.

Dr Rees was wise in not confining his investigations to an isolated area, for Wales affords a strikingly good example of the dangers arising from arguments based on such grounds. In this connection, attention may perhaps be drawn to the close similarity apparent in the distribution of ancient manors recorded in the diagram facing p. 128 and that of present-day market-towns as evidenced in "An Agricultural Atlas of Wales" prepared for the Oxford Institute of Agricultural Economics by Mr. J. Pryse Howell. In both instances certain of the natural features above referred to clearly represent the determining cause. Owing to the fact that the economic structure of the manor and the social customs of its inhabitants generally exhibited less diversity than is to be observed in cultivational operations, comparisons under these heads effected between different manors at a certain date, or between the same manors at successive periods, are apt to be more reliable than are those based upon the distribution of certain systems of cropping or the quantity of corn harvested. In the former case adjustments have at most to be made for altered values, the obsolescence of certain customs, and fluctuations in population, in conjunction with *lacunæ* due to more or less ascertainable causes; in regard to farming operations, however, unknown factors enter into the calculation.

This does not imply that Dr. Rees has not produced much of value and interest in his description of the cultivational practices followed on numerous Welsh manors, for to many readers the chapter entitled "The Working of the Manor" is the most engrossing in the volume. What it seems desirable to emphasise—namely, the uncertainty of records relating to such important questions as the yield of cereals—can best be illustrated by an extract. Thus, when describing the altered customs introduced early in the fourteenth century in order to secure commercial profits, the author states that "within a decade or so, the returns of wheat and oats doubled and almost trebled on

some manors, although there was not a corresponding increase in the acreage under the plough. The greater yield would suggest that more progressive methods of cultivation were being adopted and the high price of corn . . . gave further impetus in this direction." The normal rate of yield in the case of wheat was about twelve bushels per acre, and although, of course, he does not suggest that this figure was raised to the impossible level of twenty-four or more bushels, Dr. Rees appears to hold that it was considerably augmented. Is it certain, however, that high prices were not causing stored grain to be put on the market, and, further, is it clear that the proportion of fallow was not temporarily cut down, or barley and other corn partly superseded by oats? Plausibility seems added to these questions by two passages in the same chapter. In one, Dr. Rees declares that "only a few manors were at first able to avail themselves of the good markets," and in the other he points out that "irregularities, such as fallow land being allotted to oats or crops being repeated on the same ground for two successive years, were common."

The description of the Black Death shows that, although pasture land predominated in Wales and the population was sparsely distributed, there is little difference to be detected between the rate of mortality it occasioned there and in other parts of the country, *e.g.* in the arable districts of England; recovery was perhaps somewhat quicker, but "complicated" by the Glyndwr Rebellion, the physical and social effects of which were widespread.

This work constitutes a valuable addition to the bookshelves of both the economist and the historian. It is magnificently documented and indeed abounds in footnotes; an excellent glossary of Welsh and Latin terms is provided, and there is an adequate index.

J. A. VENN

Commercial Relations between India and England (1601 to 1757). By BAL KRISHNA, Ph.D., Principal and Professor of Economics, Rajaram College, Kolhapur. (London: G. Routledge & Sons. 1924. Pp. xxii + 370. 14*s.* net.)

DR. BAL KRISHNA has attempted to furnish students with a comprehensive history of the development of trade between England and India during the period when the East India Company was concerned, wholly or mainly, with commerce; his narrative begins with the founding of the Company, and ends

with the year which is usually taken as marking the commencement of the epoch of territorial expansion. The method of attack is sound. The author rightly places little reliance on the incomplete, and occasionally biassed, narratives which appeared during the eighteenth and nineteenth centuries; he has gone straight to the contemporary records, unpublished, and still largely uncalendared, has compiled his own figures, and has interpreted them with the aid of a considerable literature, set out in a condensed bibliography.

In order to estimate the value of his work, it is necessary to consider first the appendices, comprising about 80 pages, mainly tabular matter, and representing an immense amount of labour. The figures are clearly displayed, and well referenced; such tests as it has been possible to apply indicate a high standard of accuracy, but the tables are not immaculate, being marred by occasional errors, which may be either misreadings, or misprints such as are to be expected in a book printed in England while the author was in India. The errors which have been noticed affect only single digits or details of description, and, taken as a whole, the statistical basis of the study may be accepted, though readers who wish to rest important conclusions on particular figures will be well advised to verify them from the sources. The narrative which rests on this basis is somewhat unequal, the opening chapter being the least satisfactory, but the important facts are brought out, and the conclusions drawn are usually sound, or at least arguable. The book is thus worthy of the attention of serious students.

It is not, however, altogether easy reading, mainly, as it seems to me, because the author is servant rather than master of his sources. The result is seen in unexplained archaisms, such as "disparate stock" (p. 178) or "kentledge" (p. 245); in the use of obsolete units and trade-descriptions; in uncritical reproduction of exuberant epithets; and in sudden changes of standpoint, which at times make the text difficult to follow. A few examples of these difficulties must suffice. The author describes the trade in cotton cloth in terms of the "piece," but gives no warning to his readers of the uncertainty attaching to this unit. In the seventeenth century a "piece" varied from about 7 to 40 square yards according to the kind of cloth, and a fourfold increase in pieces might thus have coincided with a decrease in quantity: the unit did well enough for merchants, because the composition of the annual consignments did not vary greatly from year to year, but, used over a century or more, it may mislead rather seriously.

The failure to distinguish exports clearly from re-exports will puzzle students who know the present, and want to know the past. In chap. vii, for instance, the Indian exports treated in succession are piece-goods, tea, coffee, silk, saltpetre, and it takes very careful reading to discover that the tea and coffee were not Indian produce, while the other exports were. Again, the author first says correctly (p. 32) that mace and nutmegs were yielded only by the Banda Islands, and then goes on to tell us that they were "yielded" by Java and Borneo; the fact he is groping for is that Banda produce could occasionally be bought in other islands for re-export, but the student has to discover this for himself. As to obsolete trade-descriptions, it is enough to ask if one reader in a thousand will get any idea from the statement (p. 194) that "Stained calicoes, Sooseys, Shalbaftas, Taffaties, Nillas, Ginghams, Pallampores, etc. were included in the list of prohibited goods."

These examples will show that the book is not altogether easy reading, and in fact there are enough difficulties to detract from its value to the student. There are also some defects in matters of form. The only map given is illegible without a lens; the sources of quotations are frequently not indicated with precision; and the introduction in them of italics without warning is an altogether undesirable practice. After making all necessary deductions, however, the book remains a monument of patient labour, containing an immense number of facts not readily available elsewhere, and discussed in a manner which commands respect, if not always agreement. The tone of the discussion is usually judicial, though here and there the adjectives are too strong; "fatal," for instance on p. 65 should be read as "injurious," and "inexpressible" (p. 72) as "very serious." An exception to this general statement is the outburst of rhetoric on the subject of exploitation which begins on p. 164; it must be regarded as a blemish on the book, but, speaking for myself, I welcome all such signs that Indian opinion is becoming alive to the evils of exploitation, because they enable us to hope that by and by Indians will turn their attention to the exploitation of Indians by Indians, and so help to clean up one of the grimiest corners of the modern economic world.

W. H. MORELAND

Free Trade and Peace in the Nineteenth Century. By HELEN BOSANQUET. Publications de l'Institut Nobel Norvégien. Tome vi. (London: Williams and Norgate. 1924. Pp. 155.)

Is free trade conducive to peace? This question naturally suggests others. Can we find an answer to it by historical study? Can we discover if free trade has actually promoted peace, and limitations to freedom war since 1776? Has history a verdict, and, if so, what is that verdict? The reader who asks these questions will find that they are kept alive and nourished by Mrs. Bosanquet's volume. They are not extruded from his mind by an excess of historical minutiæ, nor killed by a definite answer to them. It is the author's purpose to give a general account of those episodes of thought and action which might be deemed revelant by an inquirer. The episodes, in themselves for the most part well known to the student of economic history and opinion, have been picked out of the context in which he usually finds them, and collected together with a very fair sense of their relative importance as data for our problem. Thus we can view them grouped in a single picture and can apprehend by one glance a greater mass of detail than we could if our author had not done this admirable piece of work.

It should be said at once that this is in no sense a book of propaganda. There is no array of arguments, no forensic marshalling of facts, no cunning selection, even, of those stories which have the right moral. The materials are dealt with in a strictly scientific and impartial spirit. The evils of unrestricted commerce are heavily emphasised. The many disappointed hopes of free traders are called to our attention.

And what is the conclusion? The author does somehow lead us to the belief that free trade is conducive to peace. Let us scrutinise the path along which she takes us. The narrative is on the whole chronological, though there are some cross-country chapters dealing with the Navigation Acts, the slave trade, American history, and other matters. The evidence presented is, like most historical evidence of the kind, unprecise and inconclusive. The tale which we seem to be able to read is roughly this. A nation most commonly restricts trade in the interests of self-sufficiency. If, and only if, such a nation already has all the necessary resources, no harm results. "The great size and diversified climates of the United States have enabled them to maintain a Protective policy without being driven, as Europe was at the

end of the century, to an aggressive search for new markets and new sources of raw material." The European nations, on the other hand, became involved in a "feverish competition for markets which has led not merely to devastating war and hardly less devastating preparations for war, but has greatly retarded the development of the resources in question." The policy of the open door, however, pursued by Great Britain rendered the evils less.

It is clear why the aim of self-sufficiency should lead to a struggle for the sources of raw material. Mrs. Bosanquet does not make it quite so plain why it should cause more stress to be laid on the need for expanding markets. Perhaps she rather over-estimates the importance of self-sufficiency and is thereby led into making an exaggerated contrast between the policy of Great Britain and that of the continental nations. What they have sought (but to be accurate a distinction between Germany and France should be drawn) has been rather to develop the most up-to-date types of Gross Industrie within their own boundaries, and to acquire the prestige and dignity which their possession is supposed to confer and the social organisation which it entails. The party which drove the State in this direction was the high capitalist interest, seeking to become preponderant; this interest was already preponderant in Great Britain. In her early chapters Mrs. Bosanquet points out that in the first half of the century those nations which rejected the advice of England to adopt free trade were, in fact, following the example which she had previously set. The imitation lasted on. To be like England remained the ideal; the means were necessarily different. Mrs. Bosanquet was probably thinking too much of Fichte's Geschlossener Handelstaat, too little of List's Manufakturkraft. In another place too she makes a somewhat rigid contrast between the conduct of England and that of other nations. Referring to Enfantin's amendment of *si vis pacem, para bellum*, "if you would preserve peace, then prepare for peace," she writes, "England alone among nations has chosen the second way." This is probably over-praise.

Her conclusions may be put in general terms as follows. Since free trade leads to greater intercourse, it will promote deeper friendliness and mutual understanding, and so lessen the chances of war. But against this, greater intercourse involves more causes of friction. If, at the worst, these two effects cancel each other out, there remains the decisive consideration that the more free trade there is, the more nations lose by war, and so the less likely are they to indulge in it. This is the general

proposition; there is also a more special one. If a nation determines by legal restriction or force to alter the course of trade, it matters not whether at the bidding of a sound economic long-period calculation, as in the protection of infant manufacturing industry, or in pursuit of the glory of a modern industrial civilisation, she makes war more probable. And this is the more so, the less liberty her neighbour nations allow to the foreigner of buying and selling within their own frontiers. So far all is in favour of free trade. But free trade is capable of one cardinal sin. Free traders sometimes desire to coerce others into adopting free trade against their will. This may take the form of intrusion into backward countries by force of arms. Or it may cause commercial treaties to be drawn up when one party is likely to repent. Pitt's treaty was a leading cause of revolutionary France's hostility to England. Mrs. Bosanquet concludes that the advance to free trade by commercial treaty is more dangerous than advance by the direct independent action of the separate countries. Or it may lead merely to irritating and therefore belliferous exhortation. The story of how England preached free trade in vain after 1815, when other nations believed that it was in her interest but not in theirs, is well told. But this sin is not essential or peculiar to free trade. Any cause which becomes militant is a danger to peace. Therefore these arguments do not affect the main conclusion in favour of free trade.

And if all this seems clear by the light of reason, and in need of no additional illumination, then we have light too on the problem of how Mrs. Bosanquet succeeds in making materials, necessarily so inchoate, yield a conclusion. It is reason which addresses us in the guise, or disguise, of history. None the less the book is highly valuable. Every honest man will want to be assured that history, if silent, is at least diligently questioned. Most dishonest men will report spurious answers. This book is a comfort and a boon to honest inquirers.

Few books that appear now are as delightfully printed as the publications of the Institut Nobel Norvégien.

R. F. HARROD

Czechoslovakia: A Survey of Economic and Social Conditions. Edited by DR. JOSEF GRUBER. (New York: The Macmillan Company. 1924.)

THIS is a collection of essays by nineteen authors, of whom ten hold high posts in the Czech Civil Service, five are Professors

at Czech Universities or High Schools, and two are late Cabinet Ministers. The position of the authors accounts for a good deal in the book, which supplies an authoritative *exposé* by competent writers, but to which one can hardly look for independent views and still less for independent criticism. It might almost be described as a semi-official publication and slight touches of propaganda can be discerned in it, which, however, like most of the Czech official propaganda, is very restrained and unobtrusive. Important statistical material is supplied, and as a reference work the book is certainly valuable.

Czechoslovakia enjoys an exceptionally fortunate position of internal economic balance; about equal numbers are engaged in industry and agriculture, and except in wheat, rye and meat, the produce of her agriculture covers, and more than covers, her requirements. In fact, the trade balance in food and drink is invariably favourable to Czechoslovakia, her exports of barley, hops, fruit, sugar, alcohol and beer by far exceeding her imports of cereals and meat. Similarly, although she possesses a well-developed wood and paper industry, her exports of timber exceed her imports. As for mineral resources, Czechoslovakia is very rich and exports considerable quantities of coal and lignite, in spite of the very high requirements of her own industries, which easily formed about three-fourths of the industries of Austria-Hungary. The value of textiles exported from Czechoslovakia as a rule exceeds the value of raw cotton and wool imported by her, *i.e.* the work of her textile industries more than covers payments made abroad for clothing her own population. Iron and steel, machinery and glass, form further important items of her export trade.

Patriotic Czechs writing about the national resources, the agriculture and industries, the railways, and the postal organisation of their country, need merely state the exact facts to make the economic propaganda the country may require. Equally creditable to Czechoslovakia is her record of currency management during the post-war period, when, alone of all the late belligerent countries of Central and East-Central Europe, she never engaged in wild inflation. More debatable, however, is her Government finance, with its vast expenditure on armaments and on an overgrown Civil Service, its excessive taxation of joint stock companies and its taxes on production, *e.g.* the coal tax; and here one feels in Professor Gruber's book the omissions only too natural in a publication of an, in a way, semi-official character. Similarly, the article on Agrarian Reform is necessarily an *ex parte* state-

ment; written by an official of the office charged with the carrying out of the policy, it could hardly be expected to give the case of its opponents—and there is a good deal to be said on both sides.

Most of the essays are in one respect rather imperfect: they base themselves mainly on pre-war figures or on the statistics for 1920 and 1921, which are hardly representative of anything like normal conditions. The Czechoslovak currency did not get stabilised till about the end of 1922; in November 1921 more than 400 Czech kronen were paid for the pound sterling, in the summer of 1922 even as few as 125. But only second in importance to movements of the Czech currency were for Czechoslovak trade those of the Austrian, German, Hungarian and Polish currencies; and as the latter three did not get stabilised until about a year ago, the figures of Czechoslovak trade even for 1923 can hardly as yet be taken to give a picture of approximately normal conditions. It is to be hoped that a new edition of Professor Gruber's book will soon be published, and that when this takes place the figures quoted in the various articles will be brought more closely up to date than is done in the present edition; for, surely, in a book published in September 1924 one may expect to find more figures for 1922 and 1923 than appear in this work. Also, by better co-ordination between the various writers, a certain amount of tiresome repetition might be avoided.

It is further to be regretted that when figures for the value of production, trade, etc., are quoted in Czech kronen, at least their approximate equivalents are not added in dollars; this would seem the more essential in view of the considerable oscillations which occurred in the value of the Czech krone between 1918 and 1923. Naturally those very oscillations make a recalculation into gold extremely difficult, but without at least a rough estimate of that kind the figures are valueless for the foreign reader, or even misleading. Lastly, the use of the word "billion" should be avoided; in America (and also in this book, published in America) it is used for one thousand millions, whereas in Europe it usually stands for one million millions. In view of this uncertainty of meaning it would be preferable to give such sums in figures.

L. B. NAMIER

NOTES AND MEMORANDA

THE COMMITTEE ON THE CURRENCY

Report of the Committee on the Currency and Bank of England Note Issues. [Cmd. 2393.] 1925. Price 3*d*. net.

THIS Committee was appointed by Mr. Snowden on June 10, 1924. At the outset the Committee's reference was limited to the question, " Whether the time has now come to amalgamate the Treasury Note Issue with the Bank of England Note Issue, and, if so, on what terms and conditions the amalgamation should be carried out." They heard witnesses about this from June to September, 1924. But at some later date—probably in January 1925—the Committee decided to interpret their task so as to include the general question of an immediate return to the gold standard. They did not, apparently, at this second stage of their proceedings, hear any witness except the Governor of the Bank of England.[1] In the end this broader issue became the main topic of their Report, and the ostensible subject of their terms of reference is relegated to a few sentences in the two last pages.

The Committee was a strong one, consisting of Lord Bradbury, Mr. Gaspard Farrer, Sir Otto Niemeyer and Professor Pigou.[2] But one cannot say the same of the Report. Their attitude seems to have been that, since a return to gold was in any case inevitable, it was useless to examine the objections and indiscreet to contemplate the difficulties. Consequently the less said the better (the Report could be printed *in extenso* in eight pages of the ECONOMIC JOURNAL), and it was wiser to utter a few conservative banalities than to tackle large questions. But the reader must

[1] The Committee state that " proposals for substituting the price-level of commodities in general for gold as the regulating principle of the currency have been fully and carefully explained in evidence before us." Amongst the small number of witnesses examined I am the only one named who is known to be an advocate of this principle. When I appeared before the Committee, however, the only question on which I was invited to give evidence was that of the amalgamation of the two note issues. My evidence-in-chief was wholly directed to this matter, as also was most of my cross-examination, though wider issues came in a few times incidentally. There is no indication what the evidence was, which is referred to in the above sentence, or from what quarter it came.

[2] Mr. Austen Chamberlain, who was the Chairman at the outset, resigned on accepting office as Foreign Secretary.

also feel, as he reads, that the Committee lacked intellectual interest in their subject, and were convinced from the start that there was little to be said on the subject which had not been said a hundred times already.

The result is that the Report amounts to next to nothing, and is more remarkable for its omissions than for what it contains. Two matters which they thought it worth while to discuss were the objection that the restoration of parity is technically impossible, which no serious authority has ever maintained, and the idea of fixing the exchange at 4·79 (the rate existing last February) rather than at 4·86, which no one has ever proposed. Amongst the points, on the other hand, which they thought not worth mentioning, I pick out the following in particular.

1. They dismiss without argument both the proposals for a devalued sovereign and those for a managed currency. This rules out most of the major problems, especially the importance of price-stability, the future prospects of gold-prices and the possible subordination of our credit system to that of the United States. Nevertheless, since a serious consideration of these questions would have led them far afield, the Committee's decision, to limit itself to the practical problems arising out of the proposal for an early restoration of gold, is intelligible.

2. But neither do they mention the proposals for international co-operation in the regulation of credit, so as to avoid cyclical price movements, which the Geneva Conference blessed in a famous resolution and of which Mr. Hawtrey is the foremost advocate. One might have expected that they would have coupled their advocacy of a return to gold with a warning against its possible vagaries and a plea for an organised scheme to mitigate them. But not a word; not a hint even that gold is, or could be, or ought to be, itself a managed currency. *A fortiori*, the Committee do not mention the possible connection between the working of the gold standard and the credit cycle, and between the latter and unemployment. They show no awareness of the fact that the connection between the management of the currency and the trade instability, of which unemployment is a leading symptom, is the main argument in favour of a managed currency, whether or not on a gold basis, advanced by its advocates.

3. No one was in favour of restoring gold-convertibility a year ago—for the reason that to tie the sterling price-level to the gold price-level would have involved too violent a disturbance of the former. If we contemplate making the restoration shortly, the question for those who direct practical policy is to know how

much disturbance it would involve now. It is not an easy question to answer, but it is impossible to act prudently without trying to answer it. The Committee produce no arguments and no figures and content themselves with the conclusion that "we must still be prepared to face a fall in the final price-level here of a significant, though not very large, amount, unless it should happen that a corresponding rise takes place in America."

They do not tell the Chancellor of the Exchequer that this question of the parity between the internal price-level and the external price-level is really a question of the parity between one set of internal prices, namely, those of which the sterling price × the sterling exchange is *always* at or near the world price, and those of which the sterling price × the sterling exchange is not sensitive to the prices of similar goods and services elsewhere; and that it is partly the same problem as that of the disparity between the prices in what have come to be known as the "unsheltered" industries and those in the "sheltered" industries. An improvement in the sterling exchange necessarily lowers all the "unsheltered" prices, and if this is unaccompanied by forces tending to depress the "sheltered" prices to an equal extent, those who produce in the "unsheltered" industries are in obvious difficulties, because they are selling at the unsheltered price-level and, in part at least, buying and consuming at the sheltered price-level.

It is not easy to measure the amount of the discrepancy between the two sets of prices. But it is certainly not measured by comparing the index-number of wholesale prices here with a corresponding index-number in America or in Germany. For such an index-number is largely made up of unsheltered prices, which are necessarily, whatever happens, nearly the same in both index-numbers; and the effect is to water down and to obscure any disparity between the movements in the sheltered prices here and elsewhere.

My own guess is that, compared with 1913, sheltered prices here are, at the present rates of sterling exchange, perhaps as much as ten per cent. too high in comparison with the unsheltered prices, and that the injury thus caused to the competitive position of our exports in the international market is aggravated by the fact that in Germany, France, Belgium and Italy the sheltered prices are fully ten per cent. too low. I base this guess mainly on the cost-of-living index numbers and the price-of-exports index numbers.

At any rate, whatever the answer, this is the essence of the practical problem; and a Report which ignores it is not to the point.

4. Assuming that there is some disparity between the two sets of prices, the next question must be directed to the causal process by which equilibrium can, or will, be restored. There are three alternatives :—

(1) the unsheltered prices may be raised relatively to the sheltered prices by a rise in world prices;
(2) the unsheltered prices may be raised relatively to the sheltered prices by a fall in sterling exchange;
(3) the sheltered prices may be lowered relatively to the unsheltered prices.

The first of these alterations is outside our own control—it may, quite likely, come to our rescue, but to depend upon it is a gamble. The second is that which I should have preferred as being calculated to restore equilibrium with the least possible disturbance to the course of production and to industrial peace. If we reject this and decide, on the other hand, to aggravate the disparity by *raising* sterling exchange, we are bound to consider by what causal process the third alternative can be brought about.

The Committee have made no attempt to analyse the facts; but, in so far as they discuss the matter at all, they contemplate that the necessary readjustments can be achieved by raising bank-rate. *How* this will come about—that is to say, by what intermediate steps—they give no indication. Do they mean that, by raising bank-rate and by curtailing credit sufficiently, unemployment can be intensified without limit until, even in the unsheltered industries, wages move downwards? If so, one is bound to admit the theoretical possibility. If not, what precisely is the causal process which they envisage?

I suspect that their conclusions may be based on theories, developed fifty years ago, which assumed a mobility of labour and a competitive wage-level which no longer exist; and that they have not thought the problem through over again in the light of the deplorably inelastic conditions of our industrial organism to-day.

But I suspect also a further confusion of ideas. High bank-rate has two distinct sets of consequences—one, its effect on the international flow of capital provided it is high *relatively* to the rate elsewhere, and the other its effect on the internal credit situation. Now the efficacy of high bank-rate—from the purely financial point of view—for preserving the parity of the gold standard largely depends upon the first set of consequences. If

bank-rate is made *relatively* high, the inflow of capital is stimulated and the outflow is retarded. If this tendency is set up strongly enough, the gold-parity and the financial equilibrium are completely protected—at least for the time being—and there may be little restriction, if any, of internal credit. But, in this case, the industrial disequilibrium may remain—because the greater the success of the bank-rate in producing the first set of consequences, the less is its success in producing the second.

For how would the process work out in practice? The high bank-rate is just as oppressive to the unsheltered as it is to the sheltered industries; and since the former are already working on a narrower margin of profit, it is they which are likely to go under first. Thus the high bank-rate *may* produce equilibrium (I do not say that it *must*)—not permanently, indeed, but for a longish time—by the progressive destruction of our weaker export industries and, at the same time, making good the deficit thus caused in our trade-balance by diminishing, to the necessary extent, the net outflow of capital. Foreign investment provides a sluice, the due regulation of which by means of bank-rate can maintain the internal price-level, for years together, either above or below the level outside—limited, nevertheless, in one direction by the volume of available savings, and by the other to the extent that we can live on our capital, or on what we should otherwise save. Since our available balance for new foreign investment has been, even since the war, of the order of £200,000,000 a year, we have this wide margin with which to provide for the closing down of our export industries and the support of those who were previously employed in them.[1]

Now the Committee are half-aware of this possibility and of the objections to it. They strongly deprecate the use of foreign credits for the support of the exchange. But they do not seem to notice that a high bank-rate, in so far as it attracts foreign short-loan-money to London, does exactly the same thing.

The objections to the drastic restriction of credit at home are so pressing and so obvious in the present state of trade and employment, that there will always be a strong temptation to the Bank of England to redress any adverse movement of gold to the maximum extent by attracting foreign money and to the minimum extent by restricting home credit. The recent declara-

[1] To avoid misunderstanding, let me add here what I have argued elsewhere, that, in any case, I should like to see some transference of resources from the export trades to capital developments at home, and the use of the above-mentioned margin to finance the latter. But to bring this about satisfactorily would require quite a different policy from the above.

tions of the Chancellor of the Exchequer and the action of the Bank of England (at the time of writing) in squeezing up the bill rate, which is what counts in attracting foreign money, whilst leaving other rates unchanged, which are what matter to home credit, already point in this direction. And this is only natural, because the return to gold presents us with an unpleasant dilemma —the attraction of foreign money, which is admittedly unsound, or the restriction of home credit, which is deservedly hateful.

These few remarks go only a little way towards elucidating the problem. But we have a right to expect that the authors of a Report which recommends high bank-rate as the panacea should present some sort of an account of how they expect their remedy to do the trick.

5. Ricardo recommended an appreciable margin between the buying and selling prices for gold, namely £3 17*s*. 6*d*. for the former and £3 17*s*. 10½*d*. for the latter. Sweden during the war took precautions to protect herself from a flood of redundant gold. The Genoa scheme for international credit control would be much facilitated if each country was responsible for its own stock of gold and was not free to unload its surplus at any time and in any quantity upon its neighbours. There are indeed many reasons—too many to discuss here—for reserving to ourselves, at this stage, some discretion to protect our currency against undue expansion. I attach very great importance to the Bank of England being relieved of the obligation to buy gold at a fixed price. Certainly the choice is of grave significance. But the oracle is dumb—the Committee do not mention it.

In presenting this Report at the same time as his Budget speech, the Chancellor of the Exchequer declared that "it contains a reasoned marshalling of the arguments which have convinced His Majesty's Government." From such a description one would expect an historic document which, whether one agreed with it or not, would take its place in the line of famous Memoranda which have moulded our currency policy in the past—at any rate an armoury of up-to-date arguments in favour of old-fashioned expedients. But we find instead a few pages, indolent and jejune.

J. M. KEYNES

Income and other Taxation in Saorstát Eireann

At this season of the year the thoughts of too many of us turn to examination papers, and to one such reader the Irish Free State controversy over income-tax provided a useful stimulus. Mr. Blythe's budget speech, with its slight and slighting reference to the Cork proposals, has robbed the question of actual interest for the time being, but the preceding discussion was crowded with old friends and not altogether infertile of new ideas.

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What Cork demanded was abolition of *internal* income tax. Taxation of income from foreign investments was to continue: internal income, whether from work, or waiting, or land, was to be free. It was calculated that well on towards half of the current yield of income-tax came from foreign investments and that the repeal of the internal tax would cost not much more than £2,000,000 per annum to the revenue. Mr. Blythe asserts that these calculations are erroneous. His official estimate of the yield of income tax on foreign investments is £500,000. If the Cork proposal were adopted the yield must anyhow fall to whatever figure would correspond with the irreducible minimum of external holdings which Ireland must keep. For if investments in Ireland were untaxed and foreign continued to be taxed Irish capitalists would press the sale of their foreign holdings, and buy from investors such Irish investments as are held abroad. Much of the basis for taxation would thus disappear, and existing holders of Irish investments would be several points per cent. in pocket by capital appreciation. But the real interest of the Cork Scheme is not in mundane practicalities of this kind. Let us ask rather what is to be said for and against the very general Southern Irish view that holders of "foreign" securities may, with advantage to the community, be encouraged to bring their capital back to Ireland—*i.e.* to transfer it to Irish investments. I have said that this view is "very general": that it is held by Mr. Blythe is implied in his warning to Saorstát charities to transfer their funds to home investments within three years.

What is really gained to Southern Ireland by such "recall of capital"? So far as it implies merely an exchange of holdings between Irish holders of foreign investments and foreign holders of Irish investments there would seem to be two kinds of loss to Ireland, and no economic advantage. The first loss is that

indicated above, arising from the fact that, since *ex hypothesi* the change originates with Irish capitalists, they must press the sale of their foreign holdings and bid up the prices of the foreign-held Irish investments into which they exchange. The second loss is that the number of baskets which hold Irish investment eggs is reduced, with consequent increase of risk. The only item to set on the other side is reduction of double tax complications. That, however, is, in the main, the investor's business: if from that point of view it pays him to shift his investment he will do so without patriotic or penal inducement. No doubt those who urge return of capital are principally thinking of the financing of new investment in Ireland, *i.e.* of the case where the holder of foreign securities sells out not with the idea of buying an old-standing Irish investment, but to provide an addition to the capital invested in Ireland. The Cork school is strongly infected with the idea that by abolishing tax on Irish internal income a large net addition to investment in Ireland could be accomplished, and that this addition would be highly advantageous to the country.

It is, perhaps, not sufficiently appreciated that these hopes imply an underlying assumption that the demand for capital in Southern Ireland has considerable elasticity. If this is not so, if the marginal productivity of capital decreased rapidly with increase of supply, the bounty from differential taxation would be speedily offset and the net increase of investment in Ireland would be small. If capital tried to force its way back in the teeth of inelastic demand the situation would have points of analogy with the receipt by England of a large war indemnity from Germany in imports of manufactured goods. It is curious how little any of us learn either from our own or from other people's experience. The £10,000,000 loan in Southern Ireland, assisted by a certain administrative activity, was eminently successful in inducing capitalists to exchange foreign holdings for the new national security. Part of the result has been an excess of imports which the politicians have difficulty in explaining. Everyone complains of the (partly) consequential increase of unemployment. And yet the sentimental desire to see capital flowing into Ireland is unabated. But, it may be said, abolition of income tax would create just that elasticity of demand for capital which is at present lacking. And, clearly, this point is of interest. Is it true that the remission would importantly extend the field for profitable employment of capital in Ireland? This will be so if, but only if, it induces Irishmen to organise more efficiently

and to discover new ways of turning to advantage their physical and geographical resources.

That income taxation hampers development in one respect is evident. Professor Busteed is clearly right in his contention that the failure of the income tax to draw a distinction between more and less productive expenditure is a defect in it. There is truth, and important truth, in his contention that "a man's wealth should be taxed not at the income, but at the exit—*i.e.* in his expenditure." It may, however, be questioned whether *abolition* of income tax is the right way to deal with this problem. It might be better to experiment in the direction of exempting from taxation the proportion of income which is saved. The technical difficulties would be great, but it may be doubted whether they are so great as those of "taxing luxuries," which is the alternative to which Professor Busteed inclines.

Apart from its supposed inhibition of enterprise the income tax is objected to by the Cork School as inherently inequitable, given the actual conditions of Irish economic organisation. The point is well taken that both the legal evasion of tax by farmers and its illegal evasion by small and medium businesses are *proportionately* much more important in Ireland than in England. It is a sound retort to those who urge the "essential fairness" of income tax that in its actual operation it is grossly unfair, and that it tends to envenom and pervert civic psychology. The farmers are constantly pressing for an enlargement of their existing legal privilege, the cheaters boast openly among their friends of success in defrauding the revenue, while those who will not or cannot cheat are depressed or exasperated by the sense of injustice. It is a nice question whether in such circumstances a Government will be best advised to aim at improvement of the defective instrument or to scrap it entirely. Mr. Blythe asserts plumply that he cannot afford the loss of revenue involved in abolition, and doubtless as things are this is true. It may, however, be questioned whether, on the other hand, he can afford to allow the existing defects in the tax to continue. The practical aspect of *that* question is raised by the reduction which he is making of 1*s*. in the £. Assuming that he can afford a remission of a round £1,000,000 per annum, might it not have been well to use a part of this remission in ways which would tend to improve the working of the tax? Might not part of it have been allotted, *e.g.* to experiments in the detaxing of investment, as suggested above, and again a part to charging at a lower rate income statements which are backed by suitable

accounts as compared with those which are less satisfactorily supported? To the Cork School, which is convinced on other grounds that the tax ought to be scrapped, its actual inequities count simply as additional arguments against it. It is doubtful whether they will succeed, or ought to succeed, in bringing the general body of public opinion over to this solution. It may, therefore, be legitimate to express the hope that they will transmute their abolition campaign into attempts at detailed improvement.

In itself, and apart from its relation to the income tax controversy, Mr. Blythe's budget presents two main points for discussion. First the method by which a surplus for reduction of taxation is provided, and secondly the uses to which this surplus is put. The surplus is created by classing as "abnormal" approximately one-fifth of the estimated total expenditure. The remainder of "normal" is then found to be nearly £2,000,000 less than the estimated net revenue. An allowance being made for contingencies, £1,850,000 is shown available for reduction of existing taxes, and this is increased to just under £2,500,000 by additions to the protective import duties. The reductions made are estimated to cost just under this figure in 1925–6, but considerably more, viz. £3,200,000, in 1926–7. Separation of "abnormal" from "normal" expenditure is notoriously the most delicate of all financial operations. So far as external indications can be trusted, the work seems to have been done conservatively, in view of the material improvement on the "abnormal" side of the financial outlook during the past twelve months. This improvement has two faces. Firstly, the total "compensation" bill arising out of past troubles can now be closely estimated, and turns out to be nearer £10,000,000 than the figure of £30,000,000, which used to go the rounds. Secondly, the political eclipse of the extremists makes reduction of military expenditure more plausible from the point of view of security and less likely to raise difficulties in the army itself. Granted, however, that the items of expenditure scheduled as "abnormal" are certainly or probably non-recurrent, the root question still remains: if taxes are reduced will their yield in two or three years' time balance the expenditure which will then be necessary? To this question Mr. Blythe gives a somewhat dubious answer. If all goes well politically, if the present reductions together with his protective duties and bounties stimulate economic activity, if, above all, "in the economic

field the people will face the new responsibilities, the new opportunities, the new difficulties, that are theirs, there need be no fears for the future." If, on the other hand, things do not go well, *and very well*, there will be serious difficulty in two years' time. Mr. Blythe has used his surplus in three main ways. He has reduced the rate of income-tax from 5*s*. to 4*s*.; he has increased by £600,000, *i.e.* doubled, the relief to agricultural rates; he has abolished the tea duty and cut the duty on sugar to 1*d*. per lb. Of these three changes the second seems the least defensible. The cut in income tax had to come some time, though it might have been better to begin by recasting the tax with a somewhat smaller loss of revenue. The reductions on tea and sugar are in part a set-off against the "experimental" protective duties on clothing and furniture. The wisdom of that protection is disputable, but the "incidental" revenue will be raised with more regard to "ability" than by the old tea and sugar duties. But the concession of £600,000 a year to the farmers by relief of rates has little to commend it. The urgent need of agriculture is not remission of rates, but assistance in technique and marketing. Increased expenditure directed to those ends and to preparing the way for the use of electricity when the Shannon scheme matures might have begun at the rate of £60,000 a year and risen in ten years to the full £600,000. It would probably have been of far greater use to the farmers and would have left Mr. Blythe during the coming critical years a very valuable margin.

It is hardly necessary to remark that the division between North and South must incite the Free State Financier to lean towards an optimistic policy. There is a natural desire to prove by actual figures that independence pays. It is on the whole remarkable how firmly the Southern Cabinet has stood up against this temptation. The cuts in old age pensions and in the pay of postal servants may be instanced. I have, however, the feeling that public opinion has pushed them into forcing the pace of reduction of taxes in a somewhat dangerous degree in view of the need for constructive expenditure in the next five years. The following points may be noted. The reduction of income tax is estimated to cause a loss of £1,000,000 in 1926–7, but only £200,000 in 1925–6. This difference of £800,000 must be made good by reduction of normal expenditure or by growth of revenue. In other words, the actual surplus only provides for one-fifth of the estimated cost of the reduction. The expenditure reckoned as normal includes interest on the

existing debt and £340,000 of sinking fund. That £340,000 will not much more than cover the additional interest which will be payable in 1926–7 on the enlarged debt. The yield of the spirit duties is declining, and will, we may hope, be further reduced as a result of the detaxing of tea, and still more of sugar, and, as Mr. Blythe points out, his protective duties are intended to yield less revenue as they succeed in their purpose, and finally to be removed. There are points to be made on the other side. Assuming political stability, appreciable further economies should be possible in all departments. Again the detaxing of tea and sugar may contribute more to decline in the index figure of cost of living than increased cost of clothing and boots to raise it. Apart from this the mere continuance of stability should bring down the index figure towards the British level, with a consequent saving on official salaries. Finally, upon the whole, the yield of duties seems to have been very conservatively estimated. I shall, personally, be surprised if the actual revenue does not materially exceed the estimates in the current year. These considerations need not be further elaborated, for Mr. Blythe's speech is commendably frank. He clearly indicates that he is taking big risks.

To sum up: this 1925 budget is bold, but in no sense foolhardy. With good fortune it should prove possible to maintain the reductions which have been made and to show a complete balance of revenue and expenditure, including sinking fund provision, on a debt whose "unproductive" part need not, apparently, exceed a round £20,000,000. With less good fortune the position will be "tight," but in no sense irretrievably so. Whilst for really bad luck—a recrudescence of civil war or disastrous outcome of the Shannon adventure—no present financial measures could provide. It would have been, in my opinion, stronger finance to make smaller reductions and to use them more constructively, but a budget is no place for counsels of perfection. I only hope that the average British budget for the next five years may be as sound, as human and, on the whole, as strong as Mr. Blythe's finance in the present and the past two years.

H. O. MEREDITH

The Gold Standard Act, 1925.

The text of this Act is reproduced below :—

To Facilitate the return to a gold standard and for purposes connected therewith.

1.—(1) Unless and until His Majesty by Proclamation otherwise directs—

(*a*) The Bank of England, notwithstanding anything in any Act, shall not be bound to pay any note of the Bank (in this Act referred to as "a bank note") in legal coin within the meaning of section six of the Bank of England Act, 1833, and bank notes shall not cease to be legal tender by reason that the Bank do not continue to pay bank notes in such legal coin :

(*b*) Subsection (3) of section one of the Currency and Bank Notes Act, 1914 (which provides that the holder of a currency note shall be entitled to obtain payment for the note at its face value in gold coin) shall cease to have effect :

(*c*) Section eight of the Coinage Act, 1870 (which entitles any person bringing gold bullion to the Mint to have it assayed, coined and delivered to him) shall, except as respects gold bullion brought to the Mint by the Bank of England, cease to have effect.

(2) So long as the preceding subsection remains in force the Bank of England shall be bound to sell to any person who makes a demand in that behalf at the head office of the Bank during the office hours of the Bank, and pays the purchase price in any legal tender, gold bullion at the price of three pounds, seventeen shillings and tenpence halfpenny per ounce troy of gold of the standard of fineness prescribed for gold coin by the Coinage Act, 1870, but only in the form of bars containing approximately four hundred ounces troy of fine gold.

2.—(1) Any money required for the purpose of exchange operations in connection with the return to a gold standard may be raised within two years after the passing of this Act in such manner as the Treasury think fit, and for that purpose they may create and issue, either within or without the United Kingdom and either in British or in any other currency, such securities bearing such rate of interest and subject to such conditions as

to repayment, redemption or otherwise as they think fit, and may guarantee in such manner and on such terms and conditions as they think proper the payment of interest and principal of any loan which may be raised for such purpose as aforesaid:

Provided that any securities created or issued under this section shall be redeemed within two years of the date of their issue, and no guarantee shall be given under this section so as to be in force after two years from the date upon which it is given.

(2) The principal and interest of any money raised under this Act, and any sums payable by the Treasury in fulfilling any guarantee given under this Act, together with any expenses incurred by the Treasury in connection with, or with a view to the exercise of, their powers under this section shall be charged on the Consolidated Fund of the United Kingdom or the growing produce thereof.

(3) Where by any Appropriation Act passed after the commencement of this Act power is conferred on the Treasury to borrow money up to a specified amount, any sums which may at the time of the passing of that Act have been borrowed or guaranteed by the Treasury in pursuance of this section and are then outstanding shall be treated as having been raised in exercise of the power conferred by the said Appropriation Act and the amount which may be borrowed under that Act shall be reduced accordingly.

3. This Act may be cited as the Gold Standard Act, 1925.

The following comments may be made:—

1. After an interval of more than 100 years, Ricardo's Ingot Plan (first outlined in 1811) is, in effect, adopted by Section 1 (2) of the new Act. Ricardo's ingot was to contain twenty ounces troy of fine gold.[1] In these larger days the size is raised to 400 ounces—worth nearly £1700. Dr. Bonar's most interesting article on Ricardo's proposals (ECONOMIC JOURNAL (1923), Vol. XXXIII., p. 281) is worth re-reading in the light of the new Act.

2. The repeal of the right of members of the public to present gold for mintage (Section 1 (1)(c)) is not so important as it

[1] Under the temporary clauses of the Resumption Act, 1819, the Bank was liable to redeem its notes in ingots of 60 ounces. Particulars of actual transactions under these clauses and also an illustration of Ricardo's ingot are given in the ECONOMIC JOURNAL (1923), Vol. XXXIII., p. 591.

appears at first sight, because Section 4 of the Bank Charter Act, 1844, remains in force. This section runs as follows :—

"All Persons shall be entitled to demand from the Issue Department of the Bank of England, Bank of England notes in exchange for gold bullion, at the rate of £3 17*s.* 9*d.* per ounce of standard gold . . ."

Thus we are not to follow (at present) the precedent set by Sweden of reserving to ourselves a discretion not to accept unwanted gold in unlimited amounts. Nor are we to have the limited protection recommended by Ricardo of widening the limits between the buying and selling prices (he suggested £3 17*s.* 6*d.* for the former).

3. The new obligation placed on the Bank under Section 1 (2) to provide gold bullion by weight instead of sovereigns by rate avoids the slight uncertainty which used to exist as to the exact gold points owing to the possibility of the sovereigns obtained being below full weight. The points now depend solely upon interest, freight and insurance. The freight rate outwards has been recently raised to 5*s.* per cent. On this basis and at current interest rates Messrs. Samuel Montagu and Co. put the gold export point at $4·843 to the £. The gold import point is stated to be in the neighbourhood of $4·90.

4. Convertibility from, and into, gold is limited to Bank of England notes. Currency notes remain legal tender, but are made absolutely inconvertible. Thus there is no way of obtaining gold for export except by acquiring Bank of England notes.

5. The Chancellor of the Exchequer announced that he had arranged borrowing powers under Section 2 of the Act with the Federal Reserve Board up to $200,000,000, and with Messrs. J. P. Morgan up to $100,000,000. No charge will be made for the former if it is not used. For the latter a commission of 1¼ per cent. is to be paid for the first year and half that amount for the second if the credit is not used. Thus £375,000 will be paid if the credit is not used at all.

J. M. K.

Recent Official Papers: The Budget.

Copy of a Statement of Revenue and Expenditure as laid before the House by the Chancellor of the Exchequer when opening the Budget. 1925. Price 3*d*. net.

This White Paper, as usual, contains several of the most important statistics of the year. Certain of the chief tables are reproduced below for convenience of reference :—

Debt Maturing Year by Year (approximate Totals).†

Year.	Security.	Internal.	External.	Total.
		£	£	£
1925–26	5% National War Bonds, 1 April, 1925	3,575,000	—	
	5% Treasury Bonds, 1 May, 1925	23,646,000	—	36,089,000
	5% National War Bonds, 1 Sept., 1925	8,868,000	—	
1926–27	5% Treasury Bonds, 1 February, 1927	110,132,000	—	
	Central Argentine Rly. Co., $15,000,000	—	3,082,000	113,214,000
1927–28	4% and 5% National War Bonds, and 3½% War Loan 1925–8	335,915,000	—	335,915,000
1928–29	4% and 5% National War Bonds	492,174,000	—	
	5¼% Straits Settlements Dollar Loan	—	3,341,000	495,515,000
1929–30	5½ Treasury Bonds and 3% Exchequer Bonds	46,277,000	—	
	5½% 10-year Bonds, $48,276,700	-	9,920,000	60,512,000
	5% Straits Settlements Dollar Loan	—	4,315,000	
1930–31	5½% Treasury Bonds	134,741,000	—	134,741,000
1932–33	4½% Treasury Bonds	121,266,000	—	121,266,000
1933–34	4% and 4½% Treasury Bonds	78,733,000	—	80,486,000
	5% Straits Settlements Sterling Loan	1,753,000	—	
1936–37	5½% 20-year Bonds, $143,587,000	—	29,504,000	29,504,000
1940–41	Anglo-French Loan 4½% Bonds, $13,850	—	3,000	3,000
1942–43	4% War Loan, 1929–42	65,861,000	—	65,861,000
1944–45	4½% Conversion Loan	210,587,000	—	210,587,000
1945–46	4½% War Loan, 1925–45	12,804,000	—	12,804,000
1947–48	5% War Loan, 1929–47	1,986,986,000	—	1,986,986,000
	4% Victory Bonds*	349,796,000	—	349,796,000
	4% Funding Loan*	394,874,000	—	394,874,000
	3½% Conversion Loan*	708,931,000	—	708,931,000
	Funded Debt (Consols, &c.)	313,759,000	—	313,759,000
	Terminable Annuities	13,053,000	—	13,053,000
	Treasury Bills	575,610,000	—	575,610,000
	Ways and Means Advances	166,585,000	—	166,585,000
	National Savings Certificates	368,850,000	—	368,850,000
	Loans from certain Allied Governments	—	135,700,000	135,700,000
	U.S.A. Government Loan—* $4,554,000,000	—	935,753,000	935,753,000
	Total outstanding on 31 March, 1925	6,524,776,000	1,121,618,000	7,646,394,000

† The amounts shown for National War Bonds are the Nominal totals, and do not include premiums. National Savings Certificates are shown at issue price, exclusive of accrued interest. External debt is shown at par of exchange. Loans marked * are being repaid by specific statutory Sinking Funds.

The Estimated Rates Collected by Local Authorities in 1924–25.

	£
England and Wales	142,000,000
Scotland	17,887,000

It is estimated that this total was divisible as follows, viz. :-

	England and Wales.	Scotland.
	£	£
On Relief of the Poor . .	30,400,000	3,559,000
,, Education . . .	30,400,000	4,359,000
,, Police	8,900,000	965,000
,, other services . . .	72,300,000	9,004,000
	£142,000,000	£17,887,000

Loans to Allies and Dominions.

The amounts owing by the Dominions and Allies as on 31st March, 1925, are :—

	£	£
War Loans :—		
Dominions—		
Australia	88,098,000	
New Zealand	28,681,000	
South Africa	11,884,000	
Other Dominions and Colonies .	1,146,000	
		129,809,000
Allies—		
Russia	756,705,000	
France	620,224,000	
Italy	582,510,000	
Serb-Croat-Slovene Kingdom .	29,905,000	
Portugal, Roumania, Greece and other Allies	73,107,000	
		2,062,451,000
Relief and Reconstruction Loans :—		
Austria	11,340,000	
Poland	4,770,000	
Roumania	2,235,000	
Serb-Croat-Slovene Kingdom .	2,388,000	
Other States	944,000	
Belgian Reconstruction Loan .	9,000,000	
Belgian Congo Reconstruction Loan	3,550,000	
		34.227.000

Other Loans :—		
Stores, &c.—		
France	6,726,000	
Greece	395,000	
Armenia	908,000	
Repatriation—		
Poland	168,000	
Czecho Slovakia	826,000	
Roumania	138,000	
Serb-Croat-Slovene Kingdom .	187,000	
Latvia	130,000	
		9,478,000
		£2,235,965,000

Estate Duty.

It is proposed to increase the rates of Estate Duty payable in respect of estates exceeding a net principal value of 12,500*l.* and not exceeding a net principal value of 1,000,000*l.*, as shown in the following table.

Estate Duty.—Alteration of Scale.

Principal Value of Estate.		Rate per cent. for each range.		Increase in in rate per cent.
Exceeding £	Not Exceeding £	Present Rates.	Proposed Rates.	
100	500 . .	1	1	
500	1,000 . .	2	2	
1,000	5,000 . .	3	3	No change.
5,000	10,000 . .	4	4	
10,000	12,500 . .	5	5	
12,500	15,000 . .	5	6	1
15,000	18,000 . .	6	7	1
18,000	21,000 . .	6 and 7	8	1 or 2
21,000	25,000 . .	7	9	2
25,000	30,000 . .	8	10	2
30,000	35,000 . .	9	11	2
35,000	40,000 . .	9	12	3
40,000	45,000 . .	10	13	3
45,000	50,000 . .	10	14	4
50,000	55,000 . .	11	15	5
55,000	65,000 . .	11 and 12	16	4 or 5
65,000	75,000 . .	12 and 13	17	4 or 5
75,000	85,000 . .	13	18	5
85,000	100,000 . .	13 and 14	19	5 or 6
100,000	120,000 . .	14 and 15	20	5 or 6
120,000	140,000 . .	15 and 16	21	5 or 6
140,000	170,000 . .	16 and 17	22	5 or 6
170,000	200,000 . .	17 and 18	23	5 or 6
200,000	250,000 . .	19 and 20	24	4 or 5
250,000	325,000 . .	21 and 22	25	3 or 4
325,000	400,000 . .	22 and 23	26	3 or 4
400,000	500,000 . .	24 and 25	27	2 or 3
500,000	750,000 . .	26 and 27	28	1 or 2
750,000	1,000,000 . .	27 and 28	29	1 or 2
1,000,000	1,250,000 . .	30	30	
1,250,000	1,500,000 . .	32	32	No change.
1,500,000	2,000,000 . .	35	35	
2,000,000	. . . .	40	40	

INCOME TAX.

I.—*Rate.*

It is proposed to reduce the Standard Rate of Income Tax from 4*s.* 6*d.* to 4*s.* 0*d.* in the £.

II.—*Differentiation in favour of "Earned" Income.*

It is proposed to increase the relief to "earned" income from a deduction of one-tenth of the earned income, subject to a maximum deduction of 200*l.*, to a deduction of one-sixth of the earned income, subject to a maximum deduction of 250*l.*

It is proposed to regard as earned income the investment income of taxpayers whose age is 65 years or more, and whose total income does not exceed 500*l.* In the case of married persons, this relief will be granted when either spouse is of the age stated.

III.—*Super-tax.*

It is proposed to reduce the rates of Super-tax. Details of the present and proposed scales are shown in the following table:—

	Existing Rates in the £.	Proposed Rates in the £.	
	s. d.	*s. d.*	
On the first 2,000*l.* of the income	Nil	Nil	
On the next 500*l.* (to 2,500*l.*)	1 6	0 9	
" 500*l.* (to 3,000*l.*)	2 0	1 0	
" 1,000*l.* (to 4,000*l.*)	2 6	1 6	
" 1,000*l.* (to 5,000*l.*)	3 0	2 3	
" 1,000*l.* (to 6,000*l.*)	3 6	3 0	
" 1,000*l.* (to 7,000*l.*)	4 0	3 6	
" 1,000*l.* (to 8,000*l.*)	4 6	3 6	
" 2,000*l.* (to 10,000*l*)	5 0	4 0	
" 5,000*l.* (to 15,000*l.*)	5 0	4 6	
" 5,000*l.* (to 20,000*l.*)	5 0	5 0	No change.
" 10,000*l.* (to 30,000*l.*)	5 6	5 6	No change.
On the remainder (above 30,000*l.*)	6 0	6 0	No change.

Income Tax and Super-tax.

Amount of tax, and effective rate of tax per pound of income, on specimen incomes. 1924–25 and 1925–26.

Married Couples without Children.

Total Income.	Charge for 1924–25. If Income all "Earned" Income. Income Tax (including Super-tax, if any).	Effective Rate.	If Income all "Investment" Income. Income Tax (including Super-tax, if any).	Effective Rate.	Proposed Charge for 1925–26. If Income all "Earned" Income. Income Tax (including Super-tax, if any).	Effective Rate.	If Income all "Investment" Income. Income Tax (including Super-tax, if any).	Effective Rate.
£	£ s. d.	s. d.	£ s. d.	s. d.	£ s. d.	s. d.	£ s. d.	s. d.
250	—	—	2 16 3	2½	—	—	2 10 0	2½
300	5 1 3	4	8 8 9	6½	2 10 0	2	7 10 0	6
350	10 2 6	7	14 1 3	9½	6 13 4	4½	12 10 0	8½
400	15 3 9	9	19 13 9	1 0	10 16 8	6½	17 10 0	10½
500	25 6 3	1 0	36 11 3	1 5½	19 3 4	9	32 10 0	1 3½
600	45 11 3	1 6	59 1 3	1 11½	32 10 0	1 1	52 10 0	1 9
700	65 16 3	1 10½	81 11 3	2 4	49 3 4	1 5	72 10 0	2 1
800	86 1 3	2 2	104 1 3	2 7	65 16 8	1 7½	92 10 0	2 4
900	106 6 3	2 4½	126 11 3	2 10	82 10 0	1 10	112 10 0	2 6
1,000	126 11 3	2 6½	149 1 3	3 0	99 3 4	2 0	132 10 0	2 8
1,250	177 3 9	2 10	205 6 3	3 3½	140 16 8	2 3	182 10 0	2 11
1,500	227 16 3	3 0½	261 11 3	3 6	182 10 0	2 5	232 10 0	3 1
2,000	329 1 3	3 3½	374 1 3	3 9	282 10 0	2 10	332 10 0	3 4
2,500	479 1 3	3 10	524 1 3	4 2½	401 5 0	3 2½	451 5 0	3 7½
3,000	641 11 3	4 3½	686 11 3	4 7	526 5 0	3 6	576 5 0	3 10
4,000	991 11 3	4 11½	1,036 11 3	5 2	801 5 0	4 0	851 5 0	4 3
5,000	1,366 11 3	5 5½	1,411 11 3	5 8	1,113 15 0	4 5½	1,163 15 0	4 8
6,000	1,766 11 3	5 10½	1,811 11 3	6 0½	1,463 15 0	4 10½	1,513 15 0	5 0½
7,000	2,191 11 3	6 3	2,236 11 3	6 4½	1,838 15 0	5 3	1,888 15 0	5 5
8,000	2,641 11 3	6 7½	2,686 11 3	6 8½	2,213 15 0	5 6½	2,263 15 0	5 8
9,000	3,116 11 3	6 11	3,161 11 3	7 0½	2,613 15 0	5 9½	2,663 15 0	5 11
10,000	3,591 11 3	7 2	3,636 11 3	7 3½	3,013 15 0	6 0½	3,063 15 0	6 1½
15,000	5,966 11 3	7 11½	6,011 11 3	8 0	5,138 15 0	6 10	5,188 15 0	6 11
20,000	8,341 11 3	8 4	8,386 11 3	8 4½	7,388 15 0	7 4½	7,438 15 0	7 5½
25,000	10,841 11 3	8 8	10,886 11 3	8 8½	9,763 15 0	7 9½	9,813 15 0	7 10
30,000	13,341 11 3	8 10½	13,386 11 3	8 11	12,138 15 0	8 1	12,188 15 0	8 1½
40,000	18,591 11 3	9 3½	18,636 11 3	9 4	17,138 15 0	8 7	17,188 15 0	8 7
50,000	23,841 11 3	9 6½	23,886 11 3	9 6½	22,138 15 0	8 10½	22,188 15 0	8 10½
100,000	50,091 11 3	10 0	50,136 11 3	10 0½	47,138 15 0	9 5	47,188 15 0	9 5½
150,000	76,341 11 3	10 2	76,386 11 3	10 2	72,138 15 0	9 7½	72,188 15 0	9 7½

Other Official Papers

Industrial Fatigue Research Board. Report No. 28. *The Function of Statistical Method in Scientific Investigation.* By G. Udny Yule, F.R.S. 1924. 6*d*.

The aims and purposes of statistical methods are shown by instructive examples.

Statement of Moral and Material Progress and Condition of India during the Year 1923–24. Fifty-ninth Number. Cmd. 2311. 2*s*. 6*d*. net.

The financial history of 1923–24. The action of Government with respect to Industries, Agriculture, Forests and other

Departments are set forth in a chapter on "The Economics of Administration." Another chapter which specially concerns the economist is that headed "The People and their Problems"; showing some progress in material welfare. Exportation of corn has revived; a matter for congratulation, since the exportable minimum provides a reserve which can be retained in case of necessity. Money wages are overtaking the cost of living; real wages are rising. Average income, falsely alleged to be only Rs. 30 for all India, is found by provincial statistical inquiries, taking account of payments in kind, to be much greater, *e.g.* Rs. 100 for the Residency of Madras. But progress is retarded by the "Indian outlook on life"—extravagant festivals, joint family life, excessive fecundity, religious sentiments prohibiting the use of certain foods, objection to female labour. "The whole social system of India is designed to facilitate, not the production or accumulation of wealth, but the preservation of certain traditional ideas." Improvement is expected from Co-operation, which is spreading rapidly, from Education and Sanitation.

League of Nations. Double Taxation and Evasion. Report and Resolutions Submitted by the technical experts to the Financial Committee of the League of Nations. (Geneva, 1925.) 1*s.* 6*d.*

THE report of experts appointed in 1922 by the Financial Committee. They have profited by the investigations of the four economists whose report is noticed in the ECONOMIC JOURNAL, 1923.

First Report of the Royal Commission of Food Prices; with Minutes of Evidence and Appendices. Vol. I. Cmd. 2390.

THE Commission find among other general conclusions—that food prices are higher than in 1914 mainly owing to the fall of the purchasing power of money, that the relation between wholesale and retail food prices is not far different from what it was before the war. After enquiring minutely into the conditions of the principal food industries, they argue that State trading in wheat and meat would not be advantageous. They recommend the establishment of a permanent Food Council to supervise the staple food trades.

The International Balance of Payments of the United States.

THE third annual statement of the U.S. Secretary of Commerce has just been published. The following details are taken from the summary telegraphed to *The Times*. The statement shows that foreign investments of American residents increased by nearly $1,000,000,000, to $9,090,000,000 during the year 1924, and American tourists spent $600,000,000 abroad, against $500,000,000 in 1923. At the same time deposits to the credit of foreigners in the United States increased by well over $200,000,000, to between $700,000,000 and $800,000,000.

The principal credits and debits of the balance-sheet are shown as follows :—

(Millions of dollars.)

—	Credit.	Debit.	Balance.
CURRENT ITEMS.			
Visible current items :—			
Merchandise	4,621*	3,641†	+ 970
Invisible current items :—			
Interest and dividends	614	150	+ 464
Ocean freights	75	68	+ 8
Governmental payments	—	5	— 5
Services to tourists	100	600	— 500
Charitable and missionary expenditures	—	55	— 55
Immigrants' remittances	—	300	— 300
Total invisible current items	790	1,178	— 388
Total current items other than gold and silver	5,411	4,829	+ 582
MOVEMENT OF CAPITAL.			
New foreign loans, exclusive of refunding	—	795	— 795
Sale and purchase of outstanding securities	319	114	+ 205
Foreign bonds paid off	45	—	+ 45
Principal of Inter-Allied debt	23	—	+ 23
United States paper currency	-	50	— 50
Total, capital items	387	959	— 572
GOLD AND SILVER.			
Gold	62	320	— 258
Silver	110	74	+ 36
Total, gold and silver	172	394	— 222
Total, all items	5,970	6,182	— 212
Add increase in foreigners' bank deposits, as revealed by questionnaire	- -	—	+ 216
Balance (representing errors and omissions)	—	—	+ 4

* Includes $30,000,000 for unrecorded parcels post packages.
† Includes $40,000,000 for smuggled liquors.

It is not pretended that this calculation is free from error. Possibly, says Mr. Hoover, some of the items may be as much as $100,000,000 away from the truth.

"The year's developments," he adds, "gave the United States a stronger position than ever in international finance. The United States is now the world's greatest investor, and the dollar is commonly used as a basis for international transactions even when the United States is not directly concerned, whereas ten years ago the New York foreign exchange market was comparatively insignificant and the nation was heavily indebted to Europe. Our total foreign holdings, excluding debts owed to our Government, amount to about $9,000,000,000, having increased by $1,000,000,000 during the year.

"The increasing importance of the unrecorded items in explaining our international trade is shown by the fact that in 1924 they were equivalent to roughly 22 per cent., of our total exports and 34 per cent. of our total imports, whereas in the period between 1896 and 1914 they were reckoned as only 8 per cent. and 33 per cent., respectively."

Mr. Hoover estimates the distribution of American investments abroad about as follows, the first figure in each case representing Government guaranteed obligations, the second industrial securities and direct investments:—Canada and Newfoundland, $1,060,000,000 and $1,400,000,000; Latin America, $840,000,000 and $3,200,000,000; Europe, $1,500,000,000 and $400,000,000; Asia and Oceania, $440,000,000 and $250,000,000. Total for Canada and Newfoundland, $2,460,000,000; for Latin America, $4,040,000,000; for Europe, $1,900,000,000; for Asia and Oceania, $690,000,000.

NOTES ON AUSTRALIAN AFFAIRS

(From our Australian Correspondent.)

THE Australian Prime Minister (Mr. Bruce) has announced that an amicable working agreement is about to be completed with the Imperial Government in regard to immigration, and under the scheme a large expenditure will be involved. But Australians are somewhat perplexed by recent happenings. They are prepared to welcome suitable persons, preferably of British or Nordic stocks, provided the State duly controls their admission. But when, as early in the present year, a foreign steamer unexpectedly brings to these shores some 800 passengers, derived from almost every European country and including Italians, Greeks and Jugo-Slavs, it seems to many wise to take stock of the position generally. The United States has

already fixed definite quotas for immigrants. New Commonwealth regulations are in force until 31st March, requiring foreign migrants to prove they are in possession of at least £10 in cash, and some of the recent arrivals who were unable to do this were prohibited from landing. When it is remembered that many of the new-comers cannot speak English and are consequently handicapped in seeking for work, the possibility of early exhaustion of their funds and consequently of becoming a charge upon the public revenues has to be borne in mind. The policy of the Federal Government has been declared by the Prime Minister, and the Victorian Premier (Mr. Allan) has been advised as follows:

> "My ministry is fully alive to the desirability of conserving settlement in Australia to peoples of British origin. No encouragement or assistance is offered to immigrants of alien origin. The Ministry is incurring heavy expenditure in its efforts to secure suitable British settlers."

There is, of course, the danger that amongst the incoming people there may be undesirable revolutionary propagandists smuggled in from foreign shipping centres, where no supervision of emigrants is in force. The existing maritime strike, involving stoppage of transport, has, it is asserted by some, been fomented by such undesirables. In the iron industry, at Lithgow, foreigners are said to have been accepted and employed before they could speak English.

THE population of Sydney and suburbs reached the anticipated million towards the close of 1924. That of Melbourne was less by more than 120,000; the population density of Sydney being greater than that of Melbourne.

The addition to population in the course of a few years of possibly half a million suitable British immigrants is an appreciated development.

The long-debated scheme to raise locally special public loans for migration purposes, land settlement and public works in the Commonwealth has been tentatively adopted. By agreement with the British Government the Mother Country is to pay a large proportion of the annual interest on the loans, to foster the settlement of Australia by people of the British race.

SINCE the close of the year there has been a decided fall in the selling price of wool in Australia, following upon a restriction of British buying and a slackening in Continental and American

demand. At the Sydney sales in November the high price of over £39 per bale was realised, so that later sales in February at less than £32 caused considerable comment. Victorian sales showed a considerable reduction of price also. This decline in values means a loss of possibly several millions sterling to the growers, and affects the community as a whole, since it is generally recognised that the wool clip is Australia's main stay. Restricted offerings at future sales it may be hoped will have the effect of checking any tendency to further reduced prices, but even on present figures the return must be regarded as satisfactory to the producing interests as a whole.

THE Queensland Arbitration Court recently appointed a commission consisting of Mr. James Sutcliffe (chairman), Professor R. C. Mills of Sydney and Professor J. B. Brigden of Hobart to inquire into matters in relation to the existing basic-wage of that State.

The Commission in its report has recommended that the chief guide to be followed by the court in declaring a standard basic-wage for industries of "average prosperity" should be the capacity of industry to pay wages. Cost of living should only be taken into account after capacity to pay had been ascertained. An index of capacity to pay should be obtained from an index of the value of material production per head in the preceding year, added to an index of prospective value of material production per head for the year in which the wage declaration is made—the average of the two giving the required index. In regard to industries of more, or less, than average prosperity, it should be considered whether it is practicable to fix craft wages as a percentage upon general rates in each industry.

The present basic-wage is based on the amount held to be necessary to keep a man, his wife and three children in reasonable comfort. The report suggests also a scheme of child endowment, under which parents would be paid an amount for each dependent child. This would mean a reduction of the basic-wage, or at least an alteration in the method of its estimation, with reflex action extending to the man paid by "salary."

It is considered by some that the adoption of the commission's report would be a turning-point in the history of wage regulation in Australia. This is doubtful, however, seeing that Queensland is only one of the Australian States, and industrial conditions outside her border cannot fail to have an influence upon price movements there, more especially for industries not specially

sheltered. The effect of tariff restrictions needs also to be considered, particularly where labour-cost is a high proportion of total cost, or the products subject to the vicissitudes of world markets. In New South Wales the Board of Trade in August last fixed the basic-wage at £4 2*s.* weekly, but it is now possible that some revision will be attempted in view of a reported fall in the cost of living.

A. DUCKWORTH

March 25, 1925.

NOTES ON JAPANESE AFFAIRS

(*From our Japanese Correspondent*)

IN 1924 the trade returns for Japan proper, Formosa, and Korea rose to 2,597,000,000 yen for the imports, and 1,872,000,000 yen for exports, resulting in an unprecedented excess of imports amounting to 725,000,000 yen. This was chiefly due to the steady rise of prices, which had somewhat declined, however, when compared with those ruling just before the earthquake of September 1923.

Average Price Index (100 *for July* 1914)

	1923	1924
January	214	224
April	216	217
August	216	215
October	234	226
December	226	228

Wages, which stood at 111·8 in September 1923 and rose to 116·8 in December 1924 (taking the index for the latter half of 1920 as 100), are partly responsible. But the chief explanation must be found in the currency. The note issue of the Bank of Japan rose to 1,662,000,000 yen at the end of 1924, showing a striking increase when compared with 1,287,000,000 yen of pre-earthquake days (August 1923).

Export of gold being still prohibited,[1] it is inevitable that the yen should stand very low as against the dollar. If it were not for the continuous issue of bonds and debentures in New York and London, the fall would have been still greater. Since

[1] A resolution to remove the ban was proposed by Mr. Muto of Osaka, but was rejected by the Lower House on March 19, 1925.

the Government issue of sterling loans of £150,000,000 in February 1924, the city of Tokyo has raised £3,000,000, and the importation of American capital by numerous electric power companies is now estimated to have exceeded $100,000,000.

After many fruitless conferences, the Treaty with Russia was signed at last on the 21st of January. It consists of basic agreement, protocols, memorandums on coal-mining in Saghalien, apologies for the Nikolaievsk affair, and statements concerning the Portsmouth Treaty. The most important points are the concession of coal and oil fields in Saghalien, revision of the fishing agreement, future settlement of the former Russian Court's loans to Japan, expression of regret for the Nikolaievsk murder on the part of Russia, and the prompt evacuation of troops stationed in North Saghalien on the part of Japan. It is mutually agreed not to disseminate propaganda of a dangerous nature. A Bill to guard against such propaganda was presented to the Diet and passed both Houses on the 19th March.

Under existing circumstances too much must not be expected from the resumption of commercial relations. As for the rumour of a secret agreement between the two countries, it is absolutely and officially denied by the Japanese Government.

As a result of the settlement of the oil concession by the new treaty and of the expiry of the time fixed for the commencement of the actual work by the Sinclair firm, the contract between the Soviet Government and the American firm is likely to be cancelled regardless of the protest of the latter.

In response to the visit of the Viceroy of French Indo-China last year, a special mission, headed by Duke Yamagata, was sent out in February and was received most warmly by the French authorities and residents. Not only were misunderstandings removed, but commercial relations, which were greatly restricted on account of discriminatory duties, are expected to be made much closer. Supplies of rice and minerals will be welcomed by Japan, while cotton and silk goods may be useful to Indo-China. The improvement of economic relations with the French colony will eventually lead to the extension of commercial and financial transactions between the mother country and Japan. It is reported that French capitalists will take part in the supply of funds and materials for the construction of the underground electric railway for Tokyo, which is going to be a very big undertaking.

On the 10th of January, Chinese employees of the Naigai Factory, a cotton mill owned by Japanese capitalists, walked out on the ground of unsatisfactory pay and treatment. The strike soon spread to many factories under Japanese management, and the number of strikers rose to over 30,000. After the strike had lasted for about a fortnight and in some cases somewhat riotously, the work was resumed as the result of a compromise arrived at between the factory owners and workers. The main reason for Japanese capitalists establishing factories in China is the cheapness of Chinese labour. By some the origin of the strike is ascribed to instigations of Communists and anti-Japanese propaganda.

Whatever the cause may be, if the wages are raised to the same level as in Japan, the necessity of setting up factories on Chinese soil is lost, and the tide might turn the other way, leading to the removal of factories to Japan, as the risks and dangers are greater where order and security cannot be duly kept by police or military forces in cases of emergency.

If the universal manhood suffrage Bill, which is now the burning question in the Diet, is passed, the number of voters will be increased from 3,000,000 to 12,000,000 and the predominant position hitherto occupied by the agricultural class will be weakened, new voters being recruited from industrial and commercial fields. Still, the majority of the population being engaged in agriculture, their favour is naturally courted by party men and members of Parliament. A petition was presented to the Lower House by members belonging to leading parties, urging the Government to:

1. Lessen the tax burden of the agricultural population;
2. Preserve and create owners of the soil;
3. Reform education in agricultural districts;
4. Supply capital for agricultural use;
5. Encourage various subsidiary works.

There is no doubt that it will be passed by the Diet, and its objects may possibly be met by the Government, especially at a time when distress and suffering of the agricultural districts are the subject of popular discussion.

J. Soyeda

Tokyo, March 22, 1925.

OBITUARY

Sir William Acworth

The members of the Royal Economic Society will have heard with great regret of the death of Sir William Acworth, a distinguished and active member of the Society since 1895, a member of the Council for twenty years, and a frequent contributor to the pages of the Journal.

The third son of the Rev. William Acworth of South Stoke, Bath, William Mitchell Acworth was born on the 22nd November, 1850, and was educated at Uppingham and Christ Church. After leaving Oxford, where he took a second class in the Modern History School, he was English tutor to the ex-Kaiser and Prince Henry of Prussia for eighteen months, and then a master at Dulwich College until 1885. The following year he was elected a member of the Metropolitan Asylums Board, of which he became chairman. He was also a member of the L.C.C. for three years. In 1890 he was called to the Bar.

Railways had, however, become his hobby, and he was becoming well known as a writer on them. His first books, *The Railways of England*, published in 1889, and *The Railways of Scotland*, which appeared a year later, were mainly descriptive. However, the rates inquiry, which followed the Railway and Canal Traffic Act, 1888, attracted him, and, after a visit to the United States to study the railway problems there, he produced *The Railways and the Traders*, an admirable statement of the railways' methods of attacking rate problems. After this he was *persona grata* with the railways, until his characteristic honesty compelled him to criticise their retention of old ways, old types of rolling stock, and rule-of-thumb habits. In this he won little support in the ranks of railwaymen except on the North-Eastern Railway, where he was listened to with much sympathy by Mr. (now Sir George) Gibb. His great cry was for statistics. Adequate statistics would, he believed, throw such a flood of light on the operation of the railways of this country that changes in methods would inevitably follow. Though he met with many disappointments, he lived to see the figures, which he so ardently desired, regularly issued by the Ministry of Transport, beginning in 1920.

Meanwhile Acworth had been busying himself in the work of railway education. Not many years after the London School of Economics was founded, he started a series of lectures on

Railway Economics, which he continued to steadily growing audiences for some ten years. English text-books being non-existent, he embodied his lectures in *The Elements of Railway Economics* (1905), a book which has run through half a dozen large editions, and has been translated into several languages. It is a very lucid piece of writing, and did much to establish the world-wide reputation which he later enjoyed. In addition to its great Railway Department, the School of Economics owes its unique collection of books and pamphlets on transport to the generous gift of the Library he had collected for his personal use.

The year 1899 marked a change in his outlook. He was a member of the Royal Commission on Accidents to Railway Servants, the report of which led to legislation in the following year. From this time he sought more active work in connection with the railways, though he continued to write on them. He became interested in the schemes for building new underground railways in London, and joined the Board of the Piccadilly Tube. In 1906 he was a member of the Vice-regal Commission on Irish Railways, and in the same year he served on the Board of Trade Committee on Railway Accounts and Statistics. The latter led to a substantial revision of the statutory form of the annual reports, the new form coming into use in 1913.

All this time he had been acquiring that vast knowledge of the railways of the world which was to serve him so well in the last ten years of his life, a period of remarkable activity in which he left his mark on railways in Canada and India, in South Africa and Europe. In 1916 he was invited to advise the Canadian Government on their railway policy. A supporter of private enterprise on railways, he displayed his breadth of mind by advising nationalisation of the bulk of the railways of Canada in view of their near approach to bankruptcy. His reasons for preferring private enterprise were set out in *An Historical Sketch of the State Railway Ownership*, which appeared in 1920, based on the evidence he gave before the Newlands Committee of both Houses of Congress in 1917. The ultimate solution which he proposed, and which was adopted, was a Government Company, amalgamating practically all the railways of Canada except the Canadian Pacific Railway, and a separate Railway budget.

The Rhodesian Railways next claimed his attention, and in 1920 he was selected for the Chairmanship of the Committee on Indian Railways. The report condemned the Indian railway system in its relations between the State and the companies,

especially in the matter of finance. The separation of the railway budget, and the extinction of the leasing companies with only a small financial stake in the railway, were recommendations which are on the road to being carried out. Knighthood in 1921, followed by the K.C.S.I. in 1922, was the reward for a first-rate piece of work.

Though now turned seventy years of age, he readily responded to a request from the League of Nations in 1923 to investigate the administration of the Austrian railways. Again his recommendations were mainly carried out, and the results have been so good as to win wide commendation. His crowning triumph came in the following year, when he investigated the German railway situation for the Reparations Commission. A fluent French and German scholar, he was the master-spirit of the inquiry, and the report was adopted without the dotting of an "i" or the crossing of a "t." A Government company was to succeed the Government Department in the control of this the greatest system of State railways in the world—the one, moreover, which had always been pointed to to show that State railways could be a financial success. The new organisation was admirably described in the columns of *The Times* under the title "A Railway in Pawn."

Economists have criticised his writings as being weak in Economics, and he himself often lamented that his knowledge of economic theory was so limited. On the other hand, practical railwaymen frequently criticised him on the score of being too theoretical. In spite of his critics he has left his mark on a great public service in four continents, and, whilst it is early days to judge, the writer ventures to hazard the opinion that his work and writings both show a wonderful combination of practice and theory, and a remarkable capacity for keeping a balance between the two. His work will live because it is built on sound principles —his writings will live because they are true to life.

W. T. STEPHENSON

CURRENT TOPICS

THE Annual Meeting of the Society was held at the London School of Economics on May 7, 1925. The accounts for the year were received, and the Secretary presented a report in the form of the following table :—

	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914
New Fellows and Library Members elected (Annual)	557	285	217	307	228	105	60	52	64	100	50
Fellows lost by death, resignation, or default	92	85	109	21	40	14	41	43	25	43	33
Number of Fellows and Library Members on December 31st	2156	1691	1491	1383	1097	909	818	799	790	751	694
Total Compounders included in above total ...	453	404	370	340	307	232	211	191	179	173	159
Surplus of Income over Expenditure	£1151	£721	£430	£115	£741	£137	£425	£315	£365	£326	£278

The formal proceedings were followed by tea and then by a Discussion on *The National Debt.* Lord Haldane presided, and the following, amongst others, contributed to the debate—Dr. Hugh Dalton, Mr. Alfred Hoare, Prof. D. H. Macgregor, Mr. J. M. Keynes, Mr. R. G. Hawtrey and Mr. P. D. Leake. A report of the discussion will be published in the September JOURNAL.

WE have to record, with great regret, the death, since the Annual Meeting, of Lord Milner, one of the Vice-Presidents of the Society. Lord Milner presided over the proceedings of the Annual Meeting of 1924.

THE Editors of the JOURNAL announce that, in accordance with a recent decision of the Council, there will be published in the course of the coming year a special additional number of the JOURNAL, which will be entirely devoted to Economic History. This number will be supplied to Fellows without charge. There will, therefore, be more space available, than has been possible hitherto, for the publication of articles of an historical character.

THE following have been elected to membership of the Royal Economic Society:

Adams, I. G.
Akerman, Prof. C.
Angas, L. L. B., M.C.
Aranha, R. C.
Barnes, G. C.
Bemis, A. F.
Beevers, S.
Bizzell, W. B.
Bogdan, N.
Booth, N.
Boswood, C. R.
Bowyer, S. J.
Burraston, V. H.
Butterfield, R. D.
Buttress, S. J.
Cannon, A.
Chahuan, A. R.
Cohen, I. E.
Cooke, A. T. S.
Craig, Dr. J. J.
Croucher, G. T.
Dyer, G. O.
Field, W. G.
Fisher, R.
Forsyth, J. D., M.C.
Giggins, E. W.
Glasswell, E. G.
Grove, E.
Hamano, K.
Hamilton, R. N. D.
Hanger, Prof. J. H.
Hansen, Prof. A. H.
Hardy, C. O.

Headley, W. H.
Hester-Baker, B. R.
Hodgson, F.
Hopkins, G. A. J.
Horton, S.
Hunt, W. D.
Jenkins, G.
Johnson, T. A.
Khanna, R. C.
Krishnamurti, K. I.
Lace, J. I.
Laycock, H. H.
Lee, R. E. B.
Legge, K. H.
Lewis, T.
Liddiard, R.
Llewellyn, L.
Logan, A. R.
Lones, J. B., jun.
MacDonald, J. C.
McLeod, J.
Maidment, G. J.
Malak, K. B. T.
Marshall, D. A.
Mascarenhas, T. G.
May, R. Burgess.
Miller, Lieut. A. G.
Mohindra, Prof. C.
Naranaiya, V. L.
Neill, A. J.
Newman, T. W. W.
Nishimura, K.
Parkinson, H. W.
Percival, A.
Pritchard, E. L.
Rai, H. C.
Rebello, A. J.
Regnaud, I. St. J.
Ritson, N. D.
Roberts, D. W.
Robinson, W.
Ruttledge, L. C.
Schlagenhauf, M. J.
Sheffield, E. E.
Simons, A. J.
Simons, E. H.
Spearman, A. C. M.
Stagg, E. W.
Stalker, W. H.
Steele, F. E.
Swanston, D.
Taneja, R. C.
Tebb, H. R.
Thomas, J. W.
Villamin, V.
Walker, F. B.
Watkins, L. L.
Wicks, A. W. K.
Williams, T. G.
Withers, H. R.
Wright, F.
Wynne-Bennett, H. D.
Yamauchi, N.
Yarrington, A. E.
Zee, Zing-Soo.

The following have compounded for life membership :

Angas, Lawrence L B.
Brison, C. S.
Burnett-Hurst, Prof. A. R.
Escher, W. C.
Fanno, Prof. M.
Goldberg, F.
Hardy, Charles O.
Hawes, Stanley T.
Hooper, H.
Marshall, David A.
Murdoch, J. H.
Scott, H. C.
Spelman, S.

The following have been admitted to library membership : Bankers' Trust Company, New York; The Rice Institute Library, Texas; The Teachers' College Library, Sydney; Federal Reserve Bank of Chicago; Chief Section of Statistics, Treasury Dept., Washington.

We record with regret the deaths of the following Fellows of the Society :

Acworth, Sir William M., K.C.S.I.	(elected 1895).
Desai, M. H.	(„ 1920).
Knight, P. A. R.	(„ 1922).
Leverhulme, the Lord	(„ 1907).

Mr. Henry Higgs, C.B., who is well known to our readers as having been an editor of the Economic Journal for many years and for a longer period and still the contributor of important articles and reviews, has accepted the office of University Lecturer in Economics in the University of North Wales at Bangor. He is described as an "independent" Lecturer in that he is the Head of the Department of Economics.

Our American Correspondent writes:—

"Former Senator Simon Guggenheim has given the sum of three million dollars as a fund for research fellowships. These research fellowships are to carry with them a stipend of not less than twenty-five hundred dollars and may be utilised by the beneficiary for study or travel in Economics or Social Science in any part of the world. They are open to women as well as to men, and it is expected that they will be utilised especially by the younger professors and instructors in universities. This is far and away the most important gift in recent years designed to foster economic research."

"A conference on inheritance taxation attended by Federal and State officials as well as by scientists and representatives of the public was held in Washington in February. It was opened with an address by President Coolidge and lasted two days. It was designed to ascertain some practicable method of avoiding the duplication and overlapping of inheritance taxes as among the States and the Federal Government."

Professor Edwin R. A. Seligman has been elected a foreign member of the *Accademia delle Scienze Morali e Politiche*, Naples, and he has also received the degree of Honorary Docteur es Droit from the University of Paris. An annual prize has been instituted at Mt. Holyoke College to be known as the *Edwin R. A. Seligman Prize in Economics*.

Our Australian Correspondent writes:—

"Many Australians received with regret the cabled announcement of the death of Professor Walter Scott, M.A., formerly of Sydney University, where he was for several years Professor of Classics, having been appointed in 1885 as successor to Dr. Chas. Badham. By his earnest efforts the study of Economics was stimulated, as he took a prominent part in the Foundation and work of the local society for 10 years up to 1897.

"Mr. J. B. Brigden, B.A., has been appointed to the Chair of Economics in Hobart University in place of Professor Copland.

"At the recent quarterly meeting of the Chamber of Commerce, in Melbourne, Professor Copland delivered an address in reference to the newly-instituted Chair of Commerce at Melbourne University. He considered the three main problems of the faculty to be the training for a degree or diploma, the question of research work, and the development of the study of commerce in its widest sense. Exception has been taken by some people to the inclusion in the course of lectures in accountancy, auditing, law and business practice, as possibly detracting from the value of the diploma, but these subjects are not to be compulsory.

"Comparatively few, probably, outside those more particularly interested in Economic research, are aware of the good work resulting from a gift of £1000 to the Adelaide University in 1903, for the purpose of promoting the study of commerce. The "Joseph Fisher Lecture in Commerce" was founded as the result of the donor's liberality, and the biennial lecture is printed and distributed. Ten lectures have already been delivered, the topics treated including Commercial Education, Banking, Company Law, War Finance, Currency and Prices, Money, Credit and Exchange, etc.

"At the August gathering of the Australasian Association for the Advancement of Science the formation of an Economic Society of Australia and New Zealand was proposed, and further steps have since been taken by a committee in Melbourne. It is understood that a satisfactory response has been made to the appeal for the foundation of branches in the various capital cities, and that branches in Brisbane and Hobart have been successfully organised. The earlier Australian Economic Association, which was instituted in Sydney in 1888, and published a monthly journal in which appeared contributions from many public men of the time, was re-constituted in 1901 as the Economic Science Section of the Royal Society of New South Wales, with Mr. Richard Teece as the first chairman of the Section."

The following passage from the *Observer* of April 17, 1825 may serve to remind us that academic economics in England is now just about a hundred years old :—"Mr. Henry Drummond, the banker, with a munificent liberality and zeal for the interests of science, has founded and endowed at his own expense

a Professorship of Political Economy at Oxford. The salary is £150 per annum." Mr. Nassau Senior, the first Drummond Professor at Oxford, was appointed in 1826. Mr. George Pryme, the first Professor of Political Economy in Cambridge, was appointed (without stipend) in 1828, after having lectured regularly for twelve years prior to that date. The Dublin Chair was founded by Dr. Whateley in 1832.

The Council of the Royal Statistical Society will, in 1925, again award the Frances Wood Memorial Prize, value £30. The Prize will, as before, be awarded for the best investigation of any problem dealing with the economic or social conditions of the wage-earning classes, the subject to be chosen by the competitor and to be treated on statistical lines. Those eligible to compete are :—

(1) All undergraduates or graduates of not more than three years' standing of Universities in the United Kingdom.
(2) Non-graduate students who have attended a tutorial class of the Workers' Educational Association for at least two years, during the four years preceding the award.
(3) Students who have resided, and followed a course of study for at least one year at Ruskin College, in the four years preceding the award.
(4) Such other candidates as the Council in their discretion may admit.

Theses submitted or intended to be submitted as university exercises, and also published papers, are admissible. Essays (which must be either printed or typed, and accompanied by copies of all statistical tabulations), must be sent to the Honorary Secretaries of the Royal Statistical Society, 9, Adelphi Terrace. W.C. 2, not later than 26th October, 1925.

The following numbers of the Economic Journal are required for the purpose of completing sets : 9, 37, 39, 41, 42, 43, 46, 47, 48, 49, 50, 51, 54, 55, 62, 65, 80, 82, 89, 90, 91, 95, 96, 100, 101, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, and 117. The Secretary of the Royal Economic Society would be much obliged if any Fellows who can spare their copies of these issues would send them to the Assistant Secretary,

Mr. S. J. Buttress, 6, Humberstone Road, Cambridge. A payment of 6*s*. will be made for each copy so returned.

Covers for binding the ECONOMIC JOURNAL can be obtained from the publishers, Messrs. Macmillan & Co., St. Martin's Street, London, W.C. 2, at the price of 3*s*. each.

ERRATUM

IN the ECONOMIC JOURNAL, Vol. XXXV. (1925).

On page 36 delete the last sentence of the first paragraph beginning "That is, if *Y*," and the second note.

RECENT PERIODICALS AND NEW BOOKS

Economica.

MARCH, 1925. *The Fall of Fertility among European Races.* SIR WILLIAM BEVERIDGE. The decline of human fertility since 1880 is due mainly to deliberate prevention; other hypotheses not squaring with the fact that the decline is greater according as the population is either more dense or less Catholic, *ceteris paribus*, as in the case of adjacent provinces in Holland. *Public Expenditure and the Demand for Labour.* R. G. HAWTREY. The policy of regularising the demand for labour by advancing or retarding public works cannot be defended, as by Professor Pigou in 1912, without respect to money. In abstracting the apparatus of marketing "he has poured away the baby with the bath water." If new works are financed by the creation of bank credits they *will* give additional employment. "The true remedy for unemployment is to be found in a direct regulation of credit on sound lines." *The Steel Industry of India.* DR. GILBERT SLATER. The new imports and bounty, in connection with the low price at which steel can be supplied by Europe signify that Indian taxpayers are asked to pay in order that Indian agriculturists may have the privilege of paying dear for their implements.

Journal of the Royal Statistical Society.

JANUARY, 1925. *The Growth of Population and the Factors which Control it.* (Presidential Address). G. UDNY YULE, F.R.S. As suited to represent the growth of population over a long period of time a simple formula suggested by Verlust (1838–47) is recommended. The death-rate in recent times has not controlled the growth of population; the birth-rate is the operative factor. *Discussion on the Laws Governing Population.* DR. T. H. STEVENSON, opening the discussion, referred to Prof. Bowley's article in the ECONOMIC JOURNAL for June, 1924, Dr. Brownlee's article in the *Lancet* of November 1st, and Mr. Yule's Presidential Address. He contended that there is a correlation between large families and high infant mortality; and remarked on the general fall in the birth-rate throughout Europe in this century. Professor Bowley showed that an ordinary quadratic parabola could well represent the movement of a population during a century; though for very long periods it would break down. That objection was not applicable to another familiar formula. SIR WILLIAM BEVERIDGE argued that the fall in birth-rate which set in after 1880 was not due to economic causes. DR. MARIE STOPES supported Dr. Stevenson by the observations which she had made on the death-rate of pregnancies. DR. GREENWOOD pointed out, in favour of Mr. Yule's "logistic" curve, that not only did it smooth the data as well as a parabolic curve, but it led to no absurdities beyond the range of observation. MR. YULE defended himself with spirit against criticism.

The Quarterly Review.

APRIL, 1925. *An Experiment in Socialism.* F. A. W. GISBORNE. An unsparing indictment of Australian labour policy; especially of the 1912 Navigation Act, which for the benefit of a privileged few inflicts injury on the majority of Australian citizens and on the residents in Papua and Tasmania.

The Edinburgh Review.

APRIL, 1925. *An Economic Paradox.* HAROLD COX. On the one hand, remarkable prosperity is indicated by the growth of the shopkeeping and banking and motor industries; on the other hand are unmistakable signs of decay in several leading industries—shipbuilding, engineering, cotton, coal. Wage-earners who insist that wages should not be reduced nor hours lengthened should begin to think what they will do when these industries close down. Trade Unions, instead of sending missions to Russia to absorb Bolshevic fictions, should organise inquiries in Canada and Australia as to resources available for the support of our surplus population. *Arbitration in Australia.* F. A. W. GISBORNE.

The Round Table.

MARCH, 1925. *The Gold Standard.* "A return to the gold standard cannot be ruled out on the assumption that the Central Banks of the world, while wise enough to manage an inconvertible currency, are not wise enough to prevent wild fluctuations in the value of gold." "A stable sterling exchange is of first-rate importance for the maintenance of London's pre-eminent position as the financial centre of the world." The issue between a "managed" currency and the gold standard turns on the comparison between the stability of gold and that of democratic politicians. *Volcanoes in Industry.* A survey of conditions in the industries of coal-mining, engineering, ship-building and railways brings out the division between the conventional Socialist and the uncompromising Communist.

Contemporary Review.

APRIL, 1925. *The Problem of the Slums.* ARTHUR GREENWOOD, M.P. The root trouble is the character of the slum-dwellers, who are not easily detached from their environment. The problem of re-housing, for the solution of which some not heroic measures are suggested, is aggravated by the general shortage of houses.

International Labour Review (Geneva).

FEBRUARY, 1925. *The Adaptation of Wages to the Cost of Living in Hungary.* D. PAP. The absence of good index-numbers prevents adaptation, and real wages are still much below the pre-war average. *The Practical Interpretation of Index-Numbers.* E. C. SNOW. Discussions about method and formulæ have obscured the importance of statistics adapted to the purpose of a business barometer. *Alcoholism and Industrial Accidents.* TAPIO VOIONMAA. Chronic alcoholism is a potent cause of industrial accidents; but the effect of other kinds of drunkenness is not so well evidenced. *Labour Problems in Northern Ireland.* J. A. DALE.

MARCH. *The Unification of Social Insurance.* DR. KARL PRIBRAM. *An American Experiment in Unemployment Insurance by Industry.* BRYCE M. STEWART. *The Problem of Workers' Control in Belgium.* MAX GOTTSCHALK. Belgium has not progressed far. *Some Precedents for the Family Wage System.* PAUL H. DOUGLAS. Food rationing in war time, mothers' pensions, income tax exemptions, and other precedents are instanced. *Women Trade Unionists in the United States.* AMY G. MAHER.

APRIL. *The New Social Insurance Act of the Czechoslovac Republic.* LEO WINTER. *The Administrative Machinery of Social Insurance.* J. L. COHEN. *The Classification Problem in Statistics.* R. H. COATS. There is proposed a tripartite classification of commodities according to component material, purpose, and origin; with corresponding classifications of industries and occupations.

International Review of Agricultural Economics (Rome).

OCTOBER–DECEMBER, 1924. *Agrarian Policy of Soviet Russia.* M. TCHERKINSKY. This well-documented history treats of: I. Agriculture in the period of the "war communism"; resulting in the impoverishment of the peasants; II. The revival of Agrarian Capitalism; not so rapid but that production is still much below what it was in 1913. The writer is a well-known member of the Agricultural Institute. He has had access to the documents relating to Soviet Russia at the International Labour Office, Geneva.

Quarterly Journal of Economics (Cambridge, Mass.).

FEBRUARY, 1925. *The Trend of Economics.* ALLYN A. YOUNG. Knight's limitation of theory to the negation of stupid theorising, Wolfe's "functional economics" excluding the pursuit of knowledge for its own sake, Clark's "Non-Euclidean" economics, these and other doctrines of these and other doctors are reviewed. Wesley Mitchell's "Prospects of Economics" receive especial attention. *British Opinion on the Gold Standard.* W. T. LAYTON. Even if a controlled currency be theoretically advisable the required discretionary power will not be entrusted to anyone. The gold standard might not disturb internal prices; and would promote the stability of foreign exchanges in which Britain is much interested. *A Proposal for Regulation of the Coal Industry.* J. E. ORCHARD. The chaos in the American coal industry—surplus mines, surplus miners, fluctuating output—might be obviated if the industry were controlled by a body representing conflicting interests. *Industrial Profits in 1917.* RALPH EPSTEIN. Earnings of 26,477 corporations in 108 industries for the year 1917—not a very typical year—show great variations in the proportion of net income to invested capital, ranging from less than 9 per cent. to over 60 per cent. There are also great differences between firms in the same industry. The largest firms do not earn the biggest profits. *Monetary Theory and Monetary Policy.* JAMES W. ANGELL. Among conclusions reached by comparing the views of Cassel, Keynes, Nogaro, and Rist is the following: "Control of prices can be secured in considerable degree by deliberate manipulation of the amount of money and bank credit in circulation, along the

lines suggested by Cassel and Keynes"; but not to the extent which they suppose.

The American Economic Review (Cambridge, Mass.).

MARCH, 1925. *Quantitative Analysis in Economic Theory.* WESLEY C. MITCHELL. Taking for text Marshall's dictum that quantitative analysis "must wait upon the slow growth of thorough realistic statistics," Professor Mitchell is more optimistic. *The Economists and the Public.* FRANK A. FETTER. "On the whole economics is not losing influence with the general public," notwithstanding piquant divergence between the business and the academic point of view. *Factors Affecting the Trend of Real Wages.* A. H. HANSEN. Real wages are now 25 to 30 per cent. above the pre-war level. Increased production is a dominant factor; more important than restriction of immigration. *The Stabilisation of Prices and Business.* JOHN R. COMMONS. Referring to the resolution of the Federal Reserve Board in 1923 enjoining "regard to the accommodation of commerce and business" and to "the general credit situation," the writer looks to the federal reserve system to protect the stability of the price level. He does not anticipate an early return to an international gold standard. Some kind of international understanding between the banking systems of different countries may be possible. *What can Central Banks Really Do?* T. E. GREGORY. Perhaps they cannot do so much as some brilliant economists, English, Swedish and American, have assumed. "Is it quite so certain . . . that the price structure is directly dependent upon the volume of Bank loans, and is it quite so clear . . . that the volume of Bank loans is capable of direct control by manipulation of rate of interest?" *Some International Aspects of Monetary Policy.* J. R. BELLERBY. *London Corn Market at Beginning of the Nineteenth Century.* C. R. FAY.

Journal of Political Economy (Chicago).

FEBRUARY, 1925. *English War Statistics of Pauperism.* EDITH ABBOTT. *Labor's Attempt to Govern Britain.* WILLIAM THOMAS MORGAN. *Family Allowances.* PAUL H. DOUGLAS. A discussion of questions relating to allowances paid on behalf of dependents, *e.g.*, what provision should be made for adult dependents? Should the payment be made in money or in goods? To the mother or the father? *Present-day Tendencies in German Socialism.* E. FRANKEL.

APRIL. *The Treatment of Dividends in Income Taxation.* H. L. LUTZ. *The Concept of Income in Federal Taxation.* W. W. HEWETT. The legal definition is found to be "receipts by the taxpayer of money or money's worth, growing out of the productive process, and actually realised after deducting all necessary cost of acquisition," *e.g.* the services of a housewife are not to be considered income, since not realised as payments. *The Significance of Industrial Integration.* L. K. FRANK. A growth of integration with many beneficial consequences is anticipated. *The Effect of Price Fluctuations on Agriculture.* ALOM H. HANSEN. The effects of general price fluctuations on the purchasing power of farm products and on the status of the farmer are considered. *Credit Aspects of Agricultural Depression*, II. CLAUDE L. BENNER.

Annals of the American Academy (Philadelphia).

MARCH, 1925. *Large-scale Electrical Development* is the subject of this number. The "giant power" is considered by several experts in relation to agriculture, railways, factories, etc. Professor Irving Fisher anticipates the "decentralisation and suburbanisation of population" and increased mobility of labour. Mary Pattison predicts the "abolition of household slavery," the emancipation of the housewife through the use of the vacuum cleaner, of electrical machines for washing clothes and dishes, etc.

Review of Economic Statistics (Cambridge, Mass.).

JANUARY, 1925. *Review of the Year* 1924. *Bank Statistics for the United States.* ALLYN A. YOUNG. *An Aggregative Index of Wholesale Prices* 1859–66. JAMES G. SMITH and DONALD E. MONTGOMERY. A construction presenting interesting tests and comparisons with other index numbers.

Journal des Économistes (Paris).

FEBRUARY, 1925. *Enlizement Socialiste.* YVES GUYOT. *Le Rapport du Gouverneur de la Banque de France.* X. *La situation financière et économique des États-Unies,* XXX.

MARCH. *Le système Price et l'Amortissement.* YVES GUYOT. The fallacies of Richard Price afford lessons applicable to our times. *Situation économique et financière de la Grande-Bretagne en* 1924. N. MONDET. *La Commerce extérieur de la Russie pendant l'année* 1923–1924. A NICOLSKI.

APRIL. *Les intérêts économiques et l'œuvre socialiste.* YVES GUYOT. *Les Sociétés à responsabilité limitée.* FERNAND JACQ.

Revue d'Économie Politique (Paris).

JANUARY–FEBRUARY, 1925. *La balance des comtes de la France.* P. MEYNIAL. *Les Companies Françaises d'Assurances sur la vie et les Nouvelles Conditions économiques A.-P. de Mirimonde. Critique de l' "utilité finale"* I. CHARLES TURGEON. "The doctrine of final utility is not so much a new explanation of value as a philosophic (*approfondie*) explanation of the intimate mechanism of our valuations."

Jahrbücher für Nationalökonomie und Statistik (Jena).

MARCH, 1925. The main article deals with the conception of labour divided into (1) mechanical, (2) objective, and (3) subjective. The miscellanies deal with some more objective themes: the price of bread in Berlin. 1924, and the cost of living since the war in Russia and other countries comparatively with Germany.

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

FEBRUARY, 1925. Wieser's *Theorie der Gesellschaftlichen Wirtschaft* I. ALFRED AMONN. *Ueber Wesen und Besonderheiten der Agrarpolitik.* WALTER SCHIFF.

Giornale degli Economisti (Rome).

JANUARY, 1925. *Considerazioni su alcune recenti Experienzi Monetarie.* C. BRESCIANI TURRONI. The recent experiences of Germany and other European countries illustrate important properties of depreciated currencies. *A proposito di "Meccanica*

Economica." U. Brogli, L. Amoroso. The first writer, raising difficulties about the article which the second writer contributed to the "Giornale" of January–February 1924, provokes a warm rejoinder.

February. *Le illusioni statistiche.* Felice Vinci. Errors of observation, of classification, of comparison, of simplification and of generalisation are exposed and illustrated. *La teoria degli accumuli esposta in modo elementare.* Ignatio Messina. A popular version of Cantelli's *Tavoli di Mutualita.*

La Riforma Sociale (Turin).

January–February, 1925. *I disfattisti della lira.* Giuseppe Prato. *Il conto consuntivo delle ferrovie dello Stato.* F. A. Repaci. *Idennità di guerra e debito interalleati.* G. Carano-Donvito.

Scientia (Milan).

March, 1925. *Industrial Unrest.* F. J. C. Hearnshaw. Apart from fallacious Marxist dogma there are legitimate grounds for discontent; low remuneration, insecurity of conditions of work and life, lack of control. If the disastrous evil propaganda could be eliminated, natural and healthy discontent might stimulate progress.

Metron (Ferrara).

December, 1924. *Media aritmetica media armonica e media geometrica dei corsi di una moneta deprezzata.* G. Bresciani Turroni. Applied to the fluctuations of the paper mark the three leading averages show great divergences for October 1923, but not much for December after the monetary reform. *L'augmentation de la mortinatalitè gènèrale en France pendant la guerre.* F. Savorgnan. The increased proportion of still-born infants during the war was due mainly to the larger proportion of older parents, consequent on the separation of younger consorts.

De Economist (La Hague).

January, 1925. *Een drieroudig Stiefkond.* A. N. Molenaar. The entrepreneurs' freedom of action, threatened by Socialistic legislation, is vigorously vindicated.

February. *Oorsaken en gevolgen van kapitaal-export.* W. C. Posthumus Meyjes. The causes and consequences of exporting capital are exhibited in the light of recent literature. *De "Metallist" Pierson.* Prof. H. W. Bordewijk. An examination of Pierson's views on the value of money, to which there is ascribed some inconsistency.

April. *Rome en rente.* Prof. B. F. Overmaat. Referring to an article by Prof. Van Blom in the "Economist" of last June on the doctrine of the Medieval Church concerning interest.

Ekonomisk Tidskrift (Uppsala).

1924, No. 7–8. *Statistical notes.*

1924, No. 9–10. *Protection and Free Trade.* Knut Wicksell. A review of the final report of the Tariff Commission. (The Effects of the Tariff on Sweden's Economic Life before the World War.) The writer holds that duties may change the terms of exchange in international trade to the advantage of the country that imposes them. However, the chance of actually carrying out such a policy

in practice is small, chiefly because other countries impose duties too. Hence, a mutual agreement of free trade would undoubtedly not only benefit the world as a whole, but also increase the national income of each country separately. A qualification must, however, be made with regard to the international movements of the factors of production. Universal free trade would lead to a redistribution of capital and labour between the countries, which from a national point of view is a disadvantage to those that lose their productive forces. Another argument for protection is that it may increase the share of the national income that goes to labour, not only relatively but also absolutely. Yet, Wicksell supports the free trade argument of the majority report, in which a presentation of the economic foundation of protection is given by Professor Heckscher, and criticises the minority report, which has in part been written by another of Sweden's most famous economists. He also expresses the opinion that the tariff problem is not in itself of great importance to a country like Sweden. The disastrous effect of protection lies in its creation of an atmosphere of hostility and of suspicion among the nations. *Review of A Tract on Monetary Reform.* DAVID DAVIDSON. Davidson examines why business men gain during inflation and finds that Mr. Keynes is mistaken on this point, or at least expresses himself inaccurately. Not Ricardo but MacCulloch is the originator of the purchasing power theory. Ricardo criticised it on several occasions, *e.g.* in his letters (Hollander: *Letters of Ricardo to MacCulloch*, p. 39). Why should only England and the U.S.A. aim at a fixed price level and other countries prefer a fixed foreign exchange on one of these two countries? Keynes' monetary system logically assumes the entire elimination of gold. The criticism of the gold standard is said to be unfair, because it is directed not towards its inherent principles, but towards its result in practice before the war. A rationalised and improved gold standard is not so bad as Keynes thinks. The writer adds some remarks on the fundamental purpose of the gold standard; the value of the currency should be determined by the commodity value of gold; the fact that gold is used as a basis of the currency should, therefore, not influence its value. This would be the case if gold coins were not used and if the central banks were under an obligation to buy and sell gold at a fixed price, but so managed the value of the currency that they never bought or sold anything at all. *On Economic Barometers.* HARALD WESTERGAARD. A careful analysis of some of the fundamental problems of business forecasting. The attitude may be described as that of a hopeful sceptic—sceptical towards the present results, hopeful for the future. *The Tariff Problem according to the Report of the Tariff Commission.* SVEN BRISMAN. A discussion of some of the theoretical problems raised in the report, *e.g.* the influence of the tariff on the price level.

1924, No. 11–12. *The Economic Effects of the Eight-Hours Day.* BERTIL OHLIN. This is the first part of a long essay. It deals with the reaction of the human element in production, when the working day is shortened. The experience from isolated experiments, *e.g.* in the English munitions industry, is at first analysed. Then follows an account of the results reached after a more general reduction, and, at last, the optimum working day

is discussed. The author stresses the fact, that the full influence of a shorter working day on the capacity for work cannot be seen as long as "everything else is unchanged"; for the reaction of the human element means a change in the conditions that determine the best co-operation between the worker and the machine. Hence, a readjustment of the technical organisation is necessary before the full effect of the shorter working day can be expected. *The Bank of Sweden and its Discount Policy during and after the World War.* A. WENNERBERG. In no other country has the discussion of monetary policy been so intense as in Sweden since 1914. Here the development is analysed in detail, and an account is given of the standpoint taken by the economists and the Bank on different occasions. *The Nationalisation Committee's Proposal concerning the State Railways.* OSCAR FALKMAN. The author, who is one of the non-socialist members of the committee, defends the proposal. *The Reform of the System of Municipal Taxation.* E. GEIJER.

NEW BOOKS

English.

ADAMS (ARTHUR H.). Economics of Business Cycles. London: Magraw-Hill. 1925. Pp. 268.

[Causes of cyclical fluctuations and methods of abating their violence are studied. Many theories of business cycles are cited and discussed.]

ASHLEY (SIR WILLIAM J.). The Christian Outlook. Being the Sermons of an Economist. London: Longmans. 1925. Pp. 99.

[Malthus, Jones, and the other divines who are remembered for their contributions to Economics could not have preached more edifying sermons than those which are collected in this volume, having been addressed to various congregations in different cathedrals, churches and unconsecrated buildings by a lay economist. He looks at the Industrial régime from a Christian point of view. From a familiar text he educes the "duty of thought" imposed on Christians, the duty of forecasting the future, of considering what they can contribute "to ease the passage of inevitable changes." He interprets the primary Christian commandment as prohibiting our "regarding other human beings as instruments for our individual purposes."]

BARTHOLOMEW (J. G.) and LYDE (L. W.). The Oxford Economic Atlas. With an introduction by L. W. LYDE, Professor of Economic Geography in the University of London. Sixth edition, revised by J. BARTHOLOMEW. Oxford University Press. 1925. Pp. 64.

BRIJ NARAIN. The Population of India: a Comparative Study. Lahore: Krishna. 1925. Pp. 215. Rupees 4.

[The gradual assimilation of what is best in Western industrialism is advised. There must be brought home to the masses the suffering caused by the doctrine that every Hindu must have a son or he cannot go to heaven. "It is doubtful if every Hindu goes to heaven; it is certain that many a Hindu lives in a hell upon earth."]

BURNS (C. DELISLE). Industry and Civilisation. London: Allen and Unwin. 1925. Pp. 278.

[The work purports to be a study of the psychological and moral factors underlying the economic characteristics of modern industry." The defects of the industrial system are exhibited by reference to a moral criterion.]

DARLING (MALCOLM LYALL). The Punjab Peasant in Prosperity and Debt. With a Foreword by SIR EDWARD MACLAGAN, K.C.S.I., K.C.I.E, late Governor of the Punjab. Oxford University Press. 1925.

DAVIES (A. EMIL). The Story of the London County Council. London: Labour Publishing Co. 1925. Pp. 95.

[The author is Chairman of the London County Council Labour Party, having been a Member of the Council since 1919.]

EMMETT (W. H.). The Marxian Economic Handbook and Glossary. With numerous corrections, explanations and emendations of the English version of Vol. I. of *Capital*. For the use of advanced students and beginners. London: Allen and Unwin. 1925. Pp. 350.

[To clarify the English version of Vol. I., especially the first three chapters, of *Capital* is the special purpose of the book.]

FENELON (K. G.). The Economics of Road Transport. London: Allen and Unwin. 1925. Pp. 256. 10*s*. 6*d*.

[Historical notes on the introduction of different kinds of vehicle accompanies a consideration of economic problems.]

FILENE (EDWARD A.). The Way Out. A business man looks at the world. London: Routledge. 1925. Pp. 248.

[Mass production and mass distribution are extolled. The successful business of the future must be conducted as a public service. The writer, an American shopkeeper, surveys the world of business from a new point of view.]

GILL (CONRAD). The Rise of the Irish Linen Industry. Oxford: Clarendon Press. 1925. Pp. 359.

GILCHRIST (R. N.). The Payment of Wages and Profit-sharing. With a chapter on Indian Conditions. Calcutta: University. Pp. 422. 7*s*. 6*d*.

GREGORY (T. E.). Foreign Exchange before, during, and after the War. Third impression, revised. Oxford University Press. Pp. 116.

[Some statistical material in the Appendix has been brought up to date, but not the text; "the argument is independent of the illustrations."]

HOVELL (MARK). The Chartist Movement. Edited and completed with a memoir by T. F. TOUT. Second edition. Manchester: University. 1925. Pp. 327. 6*s*.

[A revised second edition of a book reviewed in the ECONOMIC JOURNAL, 1919.]

Manchuria (North) and the Chinese Eastern Railway. Harbin (China): C.E.R. Printing Office. 1924. Pp. 454 (4to).

[The economic conditions of North Manchuria—its agriculture, forests, manufacturing industry, etc.—are described in several chapters by different writers. The Chinese Eastern Railway is the subject of the last chapter.]

MILLS (R. C.) and BENHAM (F. C.). Lectures on the Principles of Money, Banking and Foreign Exchange, and their application to Australia. Sydney: The Authors. 1925. Pp. 135.

[A course of lectures delivered under the auspices of the University of Sydney; at which the first author is a Professor, the second a Lecturer. Among applications to Australia may be noticed the consideration of a sterling exchange standard, the resolution to return to the pre-war gold standard, if and when England returns; and meanwhile to aim at stability of exchange with England.]

MINTY (L. LE MARCHANT). English Banking Methods. The practical operation of an English bank. London: Pitman. 1925. Pp. 458.

[The book purports to give a man who has already had some experience of bank life a more complete view of the work. The treatises of Gilbart and George Rae being out of date as text-books of banking procedure, it is hoped that the want thus caused may be supplied by this work.]

MOFFIT (L. W.). England on the Eve of the Industrial Revolution. A study of economic and social conditions from 1740 to 1760, with special reference to Lancashire. London: King. 1925. Pp. 312.

[The author is Lecturer in Political Economy at Wesley College, Winnipeg.]

OLIVER (E. M.). The World's Industrial Parliament. Being a short popular account of the International Labour Association set up by the Covenant of the League of Nations. London: Allen and Unwin. 1925. Pp. 63.

Palgrave's Dictionary of Political Economy. Edited by HENRY HIGGS, C.B. Vol. I., A–E. London: Macmillan Co. 1925. Pp. 924. 36s.

["Addit acervo," the Horatian motto applied by Palgrave to his work, represents a more difficult task when the compilation to which addition is to be made has been stereotyped. Mr. Higgs has executed this difficult task with skill; retaining the stereotyped pages, with modifications where possible of passages which had become obsolete, and adding a substantial Appendix containing new articles and continuations of old articles.]

SAINSBURY (ETHEL BRUCE). A Calendar of the Court Minutes, etc. of the East India Company, 1664–1667. With an introduction by SIR WILLIAM FOSTER. Oxford: Clarendon Press. 1925. Pp. 466.

SANTOSH KUMAR DAS. The Economic History of Ancient India. Calcutta: Mitra Press. 1925. Pp. 311.

[The Author is Professor of History and Economics in the Tribhuban-Chandra College, Nepal.]

SEGAL (LOUIS) and SANTALOV (A. A.). Commercial Year-book of the Soviet Union, 1925. London: Allen and Unwin. 1925. Pp. 428. 6s.

[The principal object of this compilation is to supply business men in Great Britain and America with details concerning the agriculture, industry, foreign trade, finance, etc. of the U.S.S R. (Union of Socialist Soviet Republics). There is included some more general information about the constitution, education and labour problem of the U.S.S.R.]

SHAH and KHAMBATA. Wealth and Taxable Capacity of India. Bombay: Taraporevala (London: King). 1924. Pp. 345.

SMITH (SIR H. LLEWELLYN). The Economic Laws of Art Production. An Essay towards the Construction of a Missing chapter of Economics. London: Oxford University Press. 1924. Pp. 146.

TAWNEY (JEANNETTE). Chapters from Richard Baxter's Christian Directory (1673). With a Preface by the RIGHT REV. CHARLES GORE. London: Bell. 1925. Pp. 173. 6s. net.

[Characteristic chapters have been selected by Mrs. Tawney from the Puritan *Summa-theologica* and *Morales* in one—described as perhaps the last example of Christian principles systematically applied to economic relation, such as those of buyers and sellers, masters and servants, landlords and tenants.]

VAKIL (C. N.). Financial Developments in Modern India, 1860–1924. Bombay: Taraporevala (London: King). 1924. Pp. 640.

WILLIAMS (T. G.). The Main Currents of Social and Industrial Change, 1870–1924. London: Pitman. 1925. Pp. 314. 5*s.*

WILSON (THOMAS). A Discourse upon Usury. By way of dialogue and orations for the better variety and more delight of all those that shall read this treatise [1572]. With an historical introduction by R. H. TAWNEY. London: Bell. 1925. Pp. 391. 15*s.* net.

American.

BOWDEN (WITT). Industrial Society in England towards the end of the Eighteenth Century. New York: Macmillan Co. 1925. Pp. 343.

BROOKLINGS (ROBERT S.). Industrial Ownership. New York: Macmillan Co. 1925. Pp. 105.

CARVER (T. N.). The Economy of Human Industry. New York: Macmillan Co. 10*s.* 6*d.*

CLARK (FRED E.). Readings in Marketing. New York: Macmillan Co. 1924. Pp. 705.

[Over 200 separate studies transcribed or "adapted" from authoritative publications throw light on competition, distributive co-operation, the functions of middle-men and advertisements, dishonesty in trade, and many other aspects of the modern systems of distribution.]

EAVES (LUCILE). A Legacy to Wage-earning Women. (Studies in Economic Conditions of Women, Vol. XII. Boston: Women's Educational and Industrial Union. 1925. Pp. 135.

[A sub-title describes the work as "A Survey of gainfully employed women of Battleboro, Vermont, and of relief which they have received from the Thomas Thompson Trust." Thomas Thompson was a millionaire who died in 1869, bequeathing a fortune to be applied to the relief of poor seamstresses and others who might be in temporary need in Brattleboro and another town. The Research Department of which Miss Eaves is the Director now inquires into the working of this agency.]

FEIS (HERBERT). Principles of Wage Settlement. New York: Wilson. 1924. Pp. 452.

[A collection of decisions, edited, with a general introduction to the subject and notes and comments relating to particular principles: "The Living Wage," "The Cost of Living," "The Condition of Business," etc.]

GRUBER (DR. J.). Czechoslovakia. A Survey of Economic and Social Conditions. New York: Macmillan Co. 1924. Pp. 256.

HEXTER (M. BECK). Social Consequences of Business Cycles. With an Introduction by ALLYN A. YOUNG. Boston: Houghton. 1925. Pp. 206.

[Birth-rate, death-rate, number of marriages and divorces present many interesting correlations. It is ingeniously suggested that fluctuations in the rates of birth and death may have something to do with the beginnings of business fluctuations.]

HIBBARD (HORACE B.). History of the Public Land Policies. New York: Macmillan Co. 1924. Pp. 591.

LOMAN (HENRY JAMES). The Insurance of Foreign Credits. Philadelphia: University. 1923. Pp. 142.

[A doctoral thesis.]

MERRIAM (CHARLES E.), BARNES (HENRY ELMER), and others. New York: Macmillan Co. 1924. Pp. 597.

[Essays on contemporary developments in political theory contributed by students of the late William Archibald Dunning, Professor of History and Political Philosophy in Columbia University; edited by C. E. Merriam and H. E. Elmer. Each of the editors contributes two out of the thirteen essays.]

SELEKMAN (BEN M.) and KLEECK (MARY VAN). Employees' Representation in Coal Mines. A study of the industrial representation plan of the Colorado Fuel and Iron Company. New York: Russell Sage Foundation. 1924. Pp. 454. $2.

[This volume with that which follows form the second and third studies in the new series of reports on industrial relations which are being issued by the Department of Industrial Studies of the Russell Sage Foundation.]

SELEKMAN (BEN M.). Employees' Representation in Steel Works. New York: Russell Sage Foundation. 1824. Pp. 293.

[See preceding note.]

SELEKMAN (BEN M.). Sharing Management with the Workers. New York: Russell Sage Foundation. 1924. Pp. 142.

SELIGMAN (E. R. A.). The Economic Problems of the Modern Dentist. An address before the King's County Dental Society. New York: Reprinted from the *Dental Outlook*, October 1924.

[The remarks about earning, spending, and saving are of general interest. Professor Seligman does not rule out "ability to pay" as a principle of remuneration; a principle sometimes adopted in the medical profession, and by the State in preference to Poll Taxes. Private luxury is denounced. "No man has a right to have a great picture gallery worth millions of dollars." Intelligent speculation may be practised, at least as a "hobby"—a species of secondary occupation which is recommended. Transcending economic problems is "the profound philosophical problem of the world order and our happiness."]

SELIGMAN (E. R. A.). Taxation and Prices. Address to the Academy of Political Science. New York: Academy of Political Science. 1925. Pp. 110.

[The effects of taxation on particular prices and on the general price level are considered. The latter topic connects with the production or social utility of taxation, which is not to be measured by the failure of a service to be self-supporting.]

SMITH (EDGAR LAWRENCE). Common Stocks as Long Term Investments. New York: Macmillan Co. 1924. Pp. 129.

[A comparison between the advantages of bonds and of diversified common stocks as investments.]

WHITE (HOWARD). Executive Influence in determining Military Policy in the United States (University of Illinois Studies, Vol. XII.). Urbana: University.

[The legislation for the creation, organisation and employment of the nation's armed forces forms the subject of this study.]

WRIGHT (JOSEPH). Selected Readings in Municipal Problems. Boston: Ginn. 1925. Pp. 961.

YOUNG (JOHN PARKE). Central American Currency and Finance. With an introduction by E. W. KEMMERER. Princeton: University Press. 1925. Pp. 258.

[An account of the currency systems and recent financial developments in Central America.]

French.

BONINSEGNI (PASCAL). Traité d'Économie politique. Économie politique, théorique. Premier Cahier. Lausanne: Rouge. 1925. Pp. 86.

[The writer, who is Professor of Political Economy at the University of Lausanne, follows his great predecessors, Walras and Pareto, in the use of mathematics.]

GEMAHLING (PAUL). Les grands économistes. Paris: Sirey. 1925. Pp. 330.

[A useful introduction to the history of economic doctrine, referring to some seventeen leading writers—Aristotle, Aquinas, Quesnay . . . on to Walras. Short specimens of each writer are given; for instance, one Essay of Hume (translated into French), one chapter of Cournot's *Principes*; together with a list of the writer's principal works and the titles of useful summaries or commentaries.]

HAUSER (HENRI). Le problème du Regionalisme. Oxford University Press.

HENRY (ALBERT). Le ravitaillement de la Belgique pendant l'occupation Allemande. Oxford University Press.

ROUSIERS (PAUL DE). Les Grandes industries modernes. II. La métallurgie. Paris: Colin. 1925. Pp. 283.

German.

BRENTANO (LUGO). Die deutschen Getreidezölle. Dritte Neuarbeitete auflage. Stuttgart, Berlin: Cotta. 1925. Pp. 142.

[The third edition of a study on German Corn Laws which was first published in 1910 as a tribute to the memory of Roscher. The cause of free trade is maintained against objections which have been directed against the earlier editions.]

HIRAI YASUTARO and DR. ALFRED ISAAC. Quellenbuch der Betriebswirtschaftlehre. Ausgewählte deutsche Abhandlungen. Berlin: Spaeth and Linde. 1925. Pp. 221.

LEWINSOHN (R.). Die Umschickung europäischen Vermogen. Berlin: Fischer.

POPOVICS (DR. ALEXANDER). Das Geldwesen im Kriege. Oxford University Press. 7.50 marks.

REVAI (DR. ANDREAS). Die ausländischen Wechselkurse in Frankreich seit 1914. Munich: Duncker and Humblot. 1925. Pp. 119.

RITTER (DR. KURT). Die Notwendigkeit von Agrarzöllen in neuer Beweisführung. Berlin: Parey. 1925. Pp. 72.

STRIEDER (JAKOB). Studien zur Geschichte kapitalisticher Organisationsformen. Zweite Vermehrte auflage. Berlin: Duncker and Humblot. 1925. Pp. 523.

[Monopolies, Kartels, and Companies (*Aktiengesellschaften*) in the Middle Ages down to the beginning of modern times.]

TOTOMIANZ (V.). Geschichte der Nationalökonomie und des Sozialismus. Jena: Thüringen. 1925. Pp. 192.

[A somewhat enlarged version of a history that has appeared in French and Italian; being the substance of lectures given at the University of Moscow.]

Italian.

CANINA (A. G.). La finanza del Piemonte. Nella Seconda. Metà del XVI. Secolo. Turin : Artigianelli. 1924. Pp. 142.

CESARI (E.). Elementi di Economica. Arcoli.

GOBBIS (FRANCESCO DE). Il bilancio delle Società Anonime. Milan : Albrighi. 1925.

LEVI (ETTORE). Un centra di studie di attivitá Sociali. Rome.

MORTARA (GIORGIO). Prospettive Economiche Anno Quinto. Città di Castello : Società Typographica. 1925. Pp. 433.

[This work maintains its high standard. As regards Italy in 1925 "notwithstanding some obscure points, the present condition of Italian economy appears to be good in comparison with the recent past. The economic organism is healthy and resistant, and has passed without injury through the political convulsions of the end of 1924." As an example of the world-review of the prospects of trade in various commodities we may quote from the summary of the world-position of wool: "Persistent scarcity of the raw material owing to the great restriction of flocks of sheep, and the progressive substitution of the variety rich in meat for that rich in wool. An intense demand for woollen manufactures, owing to the improvement in the economic conditions of the world. High prices"].

SERPRERI (A.). La politica agraria in Italia. Piacenza.

VOLTA (RICCARDA DELLA). Le Crisi dei Cambi. Florence : Barbera. 1925. Pp. 136.

[After setting forth relevant principles and facts, the writer investigates the causes and effects of the crises and the proposals for the stabilisation of money made by Keynes, Fisher and Cassel.]

Spanish.

BERNIS (FRANCISCO). La capacidad de desarrollo de la economia Española. Madrid : Cosano. 1925. Pp. 48.

Swedish.

BRISMAN (SVEN). Hur en nationalekonom betraktar världen. (How an Economist looks upon the World.) Stockholm : Bonnier. 1924. Pp. 38.

BRISMAN (SVEN). Vår kapitalmarknad. (Our Capital Market.) Stockholm : Svenska Bankföreningen. 1924. Pp. 15.

[A discussion of the change which the Swedish capital market is at present undergoing.]

CASSEL (GUSTAV). Stabiliseringsproblemet. (The Problem of Stabilisation.) Stockholm : Norstedt. 1924. Pp. 278.

[The principal chapter headlines are : Part I. : *The Programme of Stabilisation :* Stabilisation or deflation.—Stabilising the value of gold. Part II. : *The Road to Stabilisation :* Some fallacies.—The conditions of stabilisation.—Stabilising the interior value of money.—Consumption of capital.—International movements of capital. Part III.: *The Present Monetary Policy in its Relation to the Problem of Stabilisation :* Restoration of an international gold standard.—Return to the old parity.—Resistance towards stabilisation. —Introduction of a new gold par.]

ENSTRÖM (A. F.). On Periodicities in Climatic and Economic Phenomena and their Co-variation. Stockholm: Ingeniörsvetenskapsakademien. 1924. Pp. 56.

[The author, who is a prominent engineer, some years before the war published a work on the same subject, which he treated in a statistical manner, somewhat similar to that of H. L. Moore. The present book is a reconsidered statement in English.]

HAGSTRÖM (K. G.). Ylleindustriens produktionsförhållanden. (The Wool Industry.) Stockholm: Marcus. 1924. Pp. 110.

KARLEBY (NILS). Iakttagelser rörande socialiseringen i Österrike, 1918–1922. (Some Observations on the Nationalisation in Austria 1918–1922.) Stockholm: Tiden. 1924. Pp. 111.

LUBLIN (JARL). Ljusindustrien samt tillverkningen av glycerin. (The Candle and Glycerin Industry.) Stockholm: Tullberg. 1924. Pp. 119.

MARCUS (MORITZ). Det svenska tobaksmonopolet. (The Swedish Tobacco Monopoly.) Stockholm: Tiden. 1924. Pp. 106.

MARCUS (MORITZ). Statens järnvägar. (The Swedish State Railways.) Stockholm: Tiden. 1924. Pp. 149.

[These investigations by Dr. Marcus as well as that of Mr. Karleby are made on behalf of the Nationalisation Commission, which is studying the relation between public enterprises, owned by the State, and the political organs of the State. The tendency is distinctly away from Marxist and Fabian principles.]

OHLIN (BERTIL). Den svenska tegelindustriens utveckling 1881–1913. (The Development of the Swedish Brick and Clay Industry, 1881–1913.) Stockholm: Marcus. 1924. Pp. 79.

[Drs. Hagström's, Lublin's and Ohlin's investigations appear in the Tariff Commission series. They are somewhat on the same line as Professor Taussig's *Some Aspects of the Tariff Question.*]

ÅKERMAN (GUSTAV). Den amerikanska penningpolitiken under de senaste åren. (The Monetary Policy of the United States in Recent Years.) Stockholm: Svenska Bankföreningen. 1924. Pp. 17.

ÅMARK (KARL). Handels- och prisöversikter rörande spannmål. (The Trade and Price of Corn.) Stockholm: Marcus. 1924. Pp. 143.

[Gives some international comparisons of the prices of agricultural products.]

ÖRNE (ANDERS). Kooperatismen. (The Co-operative Programme of Society.) Stockholm: Koop. Förbundet. 1924. Pp. 50.

THE ECONOMIC JOURNAL

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ANNUAL MEETING OF THE ROYAL ECONOMIC SOCIETY

DISCUSSION ON THE NATIONAL DEBT

The Annual Meeting of the Society was held on May 7 at the London School of Economics under the Chairmanship of Viscount Haldane, President of the Society. After the transaction of the formal business of the year, a discussion on the National Debt was opened by Dr. Hugh Dalton, M.P. The principal speeches are reported below.

Dr. Hugh Dalton, M.P.: At the present moment public interest in the National Debt is at a low ebb. It raises no live, immediate political issue. The Colwyn Committee still holds occasional sittings and a number of economists and other witnesses have appeared before it. But the world is still awaiting the issue of its labours.

I am told that some people expect me to speak about the Capital Levy, but that is not my intention. I have said my say on the Capital Levy, at any rate until the Colwyn Committee reports. Moreover, its discussion lacks reality just now. The necessary political conditions for its imposition do not at present exist and, therefore, while still of opinion that it offers very solid advantages, particularly if we could count upon general good-will and public spirit in carrying it into operation, I do not propose to discuss it this afternoon.

But I wish to say a word about conversion. There is a certain section of opinion which pins great hope to conversion. I believe this hope to be mainly sentimental. I made a very simple calculation last February in the course of my evidence before the Colwyn Committee. I found that the amount of internal debt maturing in the next ten years (including debt which may, but need not, be paid off within this period, but excluding Savings Certificates) was £4,106 millions. Of this total

£165 millions bear interest at 5½ per cent., £2,698 millions at 5 per cent., £134 millions at 4½ per cent., £256 millions at 4 per cent., £63 millions at 3½ per cent., and £16 millions at 3 per cent., while the remainder is Floating Debt. If you ignore the prospect of upward conversions on the cheaper forms of debt, and concentrate attention on the possibility of downward conversions, you will find that, with the national credit standing at 4½ per cent., the maximum annual saving in interest would be only £15 millions. With the national credit at 4 per cent. the maximum annual saving would be £30 millions. But, against any saving in interest charges through conversion, must be set the consequential loss to the Exchequer in income tax and super tax, what Sir Josiah Stamp would call, I suppose, "the ravages of conversion." At present rates this loss will be nearly a quarter of the interest saved. This reduces the maximum *net* saving through conversion during the next ten years to some £12 millions or £23 millions a year respectively, according as we assume a 4½ per cent. or a 4 per cent. rate of interest *throughout this period*. But at present the Government cannot even borrow at 4½ per cent. on long term securities and a trade revival, by diverting funds from gilt-edged stocks to industry, will tend to raise the rate of interest still higher. I conclude that, even on the most favourable assumptions, conversion is worth very little as a means of securing a large and early reduction in the burden of the debt. Moreover, if we are to exploit to the full whatever opportunities for conversion may arise, a vigorous Sinking Fund policy is essential, in order to create a strong demand for Government securities and to improve the national credit.

I take the common-sense view which is not universally adopted—it is true that common-sense views are sometimes wrong—that it is desirable to pay off our debt quickly. Assuming that, for the moment, the Capital Levy is not under consideration, and since there is nothing much in conversion, I, therefore, favour a very substantial increase in the present Sinking Fund provision. It is sometimes supposed that the mere continuance of the debt, now that it has been contracted, does no particular harm to anyone. I believe that to be a complete misunderstanding. I shall say something about the external debt later. But the service of the internal debt, including the taxation which is required to meet the interest charge, involves a series of deleterious transfers of wealth. It involves, on balance, a transfer from the poorer to the richer, thus aggravating the inequality of incomes. It involves, also,

on balance, a transfer from the younger to the older generation, which is objectionable both on moral and on economic grounds. It is objectionable on moral grounds, in so far as the older generation includes war profiteers and the younger generation includes ex-service men and their dependents. It is objectionable on economic grounds, in so far as the transfer is from the more to the less active-minded members of the community. More broadly, also, the service of the debt involves, on balance, a transfer from the active to the passive elements in our economic life, since much taxation falls upon those who work and undertake productive risks, while much interest accrues to people who are not actively engaged in production at all. Further, through the great weight of taxation which it necessitates, the service of the debt acts as a check to the growth of human capital, by way of social investments in the capacities of human beings. It encourages false economies on the pretext that, if these economies were not made, the Budget would not balance. The Budget is, therefore, balanced, and some reduction of taxation is often secured, at the expense of social services, such as education and public health, the rapid development of which is urgently required. In so far as this happens, production, and also human welfare, is diminished by our failure to make full use of our human resources. In the light of these considerations, it seems to me quite clear that the continued existence of dead-weight public debt on this scale does continuing damage to our economic life.

The process of debt redemption through the Sinking Fund is salutary in so far as it reduces the debt. But it is also salutary for another reason. Nearly all the money repaid to holders of war loan will be re-invested. But a much smaller proportion of the money collected in tax revenue, in order to feed the Sinking Fund, would have been invested if it had not been claimed by the tax collector. Therefore, on balance, the process of debt redemption involves a transfer from spenders to savers and promotes the accumulation of capital and the production of wealth. I believe, though I have no time to argue it in detail to-day, that this remains true, even when full account is taken of any checks to activity and saving which high rates of taxation may engender.

There is, however, another argument against big Sinking Fund operations, which has apparently been adduced by Mr. Keynes in evidence before the Colwyn Committee. As I understand the argument, it is this. There is at the present time a

tendency for too great a proportion of our new savings to flow into gilt-edged, as distinct from industrial, investments. Sinking Fund operations will strengthen this tendency, since the new capital liberated by debt redemption will be mainly invested in gilt-edged securities, while taxation will check a certain amount of industrial investment, which would otherwise have taken place. I should not deny that there may be some danger, under present conditions, of a bad distribution of new capital between different types of investment. With a view to reducing this danger, it may well be desirable to consider certain amendments to our Trustee Acts, as Mr. Keynes has suggested.

But this line of argument does not seem to me to disprove the great net advantage of a big Sinking Fund. For a large supply of new capital going into gilt-edged investments raises the national credit, facilitates conversion and enables public bodies to borrow more cheaply. Moreover, though this is a matter on which it is difficult to get conclusive evidence, I should judge that there is a large quantity of capital lying near the margin between gilt-edged and industrial investments, and ready to shift from the former to the latter if only a slight change in their relative attractiveness occurred.

My general conclusion, in favour of a vigorous Sinking Fund policy, is, therefore, unshaken and I will pass to some concrete suggestions. I suggest, in the first place, that we should double the present Sinking Fund of £50 millions a year. That would give us a basic Sinking Fund of 100 millions a year. I suggest secondly, the introduction of some cumulative element into the business. With a Sinking Fund of £100 millions a year, which was fully cumulative from the start, we could wipe out the whole debt, both internal and external, in about thirty years. But I fear that this is too strong meat for our financiers and politicians. I therefore suggest as a milder alternative that we should add to the basic Sinking Fund, in any given future year, half the amount by which the interest charge in the previous year fell short of £300 millions. That would mean that half the future savings on the interest charge, whether through redemption or conversion, would be reserved for speeding up subsequent redemption, while the other half would be available for tax reduction or for increased social expenditure.

I have also a third suggestion, which I am anxious to float before this assembly, as I have already floated it elsewhere, for your consideration and criticism. I propose that we should reintroduce, in a new and simple form, the terminable annuity

as a device for lightening the burden of the debt. I propose that, in addition to our existing death duties, we should require the surrender to the Treasury of some part of the larger estates, or, if you prefer, of the larger inheritances, in exchange for terminable annuities which the Treasury would issue. I do not propose that the present capital value of these annuities should be equal to that of the wealth surrendered in exchange. I propose, rather, that the present annual values should be equal, so that you would be introducing a form of additional, though postponed, taxation. Suppose, for example, that you issued twenty-year annuities, in respect of which the annual payment was equal to 5 per cent. of the capital value of the wealth surrendered in exchange. Then the inheritor who received these annuities would have much the same immediate income as before, but he would know that it was limited to twenty years' duration. The wealth surrendered, on the other hand, would be applied, directly or indirectly, to debt reduction. A plan of this kind could become part of our annual taxing arrangements. It would have certain advantages for other purposes, but I ask only that it shall be considered on its merits as an instrument of debt reduction. It would mean that every year you would be transforming a certain amount of debt, carrying a capital obligation to repay, into mere terminable annuities which would run off automatically after a period of years.

I have now sketched in outline a policy by means of which, failing another war or some other contingency leading to increase of public debt, and even without a Capital Levy, we could clear off the internal debt at any rate within the lifetime of the majority of those now in middle age. As I stated at the beginning, I take the common-sense view, which in this case I believe is also the right view, that this is a most desirable consummation, well worth the additional effort in taxation and public spirit which it may involve.

One word in conclusion about the external debt. Under present arrangements, as you know, payments to America will continue, under a cumulative Sinking Fund, until 1985. The burden of the external debt needs less explanation than that of the internal debt. It is easily seen to consist in an unrequited tribute to outsiders. Here again, therefore, it seems to me quite clear that, if we can accelerate the rate of repayment, without causing trouble to ourselves in the region of the foreign exchanges, we shall be doing something distinctly advantageous. I suggested to the Colwyn Committee that any receipts we obtain

either from German Reparations or from Inter-Allied Debts should be ear-marked for the reduction of the principal of our American debt. If we can accelerate the rate of repayment of this external debt, we shall save compound interest on the later instalments, which will not have to be paid at all, and, by abbreviating the period of repayment, we shall reduce the aggregate sum of future payments of capital and interest which will fall due. I believe that, in this particular case, it is a legitimate operation for the statesman to add together these payments over a series of future years and a legitimate object to seek to reduce the total thus obtained by anticipating the later payments in the earlier years. I believe this to be legitimate, because the statesman ought, in the jargon of the books, to have a very low time-preference, so far as the interests of his country are concerned.

To sum up, and to put in other words the underlying idea of my argument this afternoon, "the most important duty of the State is to protect the interests of the future against the demands of the present."

Professor D. H. Macgregor: It is a matter of interest that Dr. Dalton should regard the Capital Levy as in suspense for this discussion. I do not wish to put it aside, but in the first place to consider how much can be done by the more usual methods of repayment. I agree with him that it is necessary to make a serious effort in the next generation to alleviate the burden. We must have regard to possible criticisms on our finance at a future date, when the generation which remembers the war has passed away, and the country may again be faced with costly measures of preparation. A war which cost £8,000 millions, and which has not resulted in anything like the expected decrease in the cost of armaments, requires as its aftermath a financial plan, if we are to be free bargainers in a future exigency that is not impossible.

To individuals the taxation is a pure burden, not offset by the dividends on the Funds; but for the war they would have obtained their dividends without the high rates of taxation. It affects enterprise through their savings, and its incidence on companies' reserves. To the nation there is some burden, apart from the external debt, in that the time of money is taken up with the preparation for, and the making of, the annual settlement. The size of the debt, in relation to the lessened sources of saving, worsens the terms on which money can be disengaged

from it for transfer to industry. I am not so sure about Dr. Dalton's argument that it causes a further inequality in the distribution of wealth; since those who receive more than they pay in debt taxation are persons who hold more debt than in proportion to their taxable capacity, and to that extent they hold less of other securities.

Considering normal methods, how fast can we go? I divide these methods into the traditional, and an amendment which might now be considered. The former has to look to three periods—the years of special depression, the return to standard conditions, and the time of possible new exigencies, if the League of Nations has not stabilised peace. To the first of these, a fixed Sinking Fund, implying a declining charge, is applicable; to the second a fixed charge, implying an increasing Sinking Fund, is applicable; to the third, a refixation of the Sinking Fund on the level it has reached, to lessen the charge, and increase the elasticity of taxation. This appears better than to fix a higher Sinking Fund now, and to have a lessening annual charge during the period of revival. If the Sinking Fund were increased to £65 millions when the depression has passed, in twenty years it would, with a fixed charge at 4 per cent., apply as much to repayment as if it had then been doubled and kept steady; and the burden would have been better adjusted to the conditions of trade. We might have applied some £2,000 millions in the first two periods. The case for a levy depends on whether this is thought rapid enough against the size of the whole debt.

The amendment is to abolish the distinction between the old and the new Sinking Funds, to budget for one debt surplus, to arrange this in decennial periods, giving relief in bad years if we were ahead of the plan. The principles of Pitt, Hamilton and Northcote are reconciled by this method. and the accounts are presented in a way suited to this plan of repayment. There is no difference in taxation, but we will not be paying off debt under the new Sinking Fund with a greater deficit on the Budget.

But any long plan may break down and any Sinking Fund may be raided. The Capital Levy is an insurance, something in hand against such raids, as well as an addition to the provisions of any plan. Dr. Dalton passes it over to-day, and his stage is so full of other actors that I do not see where he will crowd it in. It has come to mean £3,000 millions, but we need not be tied to that sum. As he has written, that is an amount worth fighting for, but it is also worth fighting against and

evading. The difficulty about so large a sum is also that it renders it more improbable that the simple method of payment by handing over War Loan will be followed. This is not any levy, but a levy for the repayment of debt. If payment can be made in many forms, the payer will apply Gresham's Law to himself, and will pay in the capital he least wishes to keep. But if it is known that £3,000 millions of War Loan are to be cancelled, then it is known that War Loan is likely to appreciate considerably, in view especially of its particular market in this country. This will not be known of any other form of holding. Hence the holders of War Loan will pay not as much but as little as they can in that simple way. To avoid that difficulty a premium would have to be placed on payment in War Loan; and this is a favour to that class of investment. The larger the levy the more serious this aspect of payment. *Per contra*, in the absence of any discriminating premium, the Treasury will find itself in possession of stocks the more difficult to realise because they were the most readily surrendered.

If we are to look forward to the international conditions that must be considered possible in twenty-five or thirty years, and to the criticism of our arrangements that may arise then, I think that a levy of £1,000 millions is worth consideration, applicable after the post-war depression. It is subject to the valuation being possible with reasonable fairness; on that I cannot pretend to decide. The supply of public securities has increased as compared with 1913 four or five times in relation to the national income; and the basis of credit should not be impaired by a levy of this amount. The crucial question is whether, the debt being as large as it is, and fixed in money, we are content to foresee about £2,000 millions applied in this generation, that is to say, whether we are politically optimistic; or whether, being less optimistic, we should place ourselves somewhat in hand, either as an insurance or for an increment.

MR. ALFRED HOARE: I am cordially in agreement with what Dr. Dalton has said, but I see no chance of a Conservative Government doing anything more towards repaying the debt than consists in keeping up its present figure of £50 millions, the debt being £8,000 millions, including currency notes. It may be said to undertake to repay in 160 years. Surely that is an unnecessarily long period. Moreover, one may feel very confident that this will be raided at some time in the future, as occurred with the poor little Sinking Fund of £26 millions on which I was

brought up. As regards the burden of debt, I am rather inclined to what I should call the common-sense point of view, namely, that the whole of the internal debt is merely one of the agencies in operation by which we exchange our goods and service with each other. I believe that the distribution of our income will be very much the same by whatever process we effect it. The really important thing, as pointed out by Professor Bowley in his little pamphlet five years ago, is to increase our output per head. I have little hope from the Conservatives and equally little from the Labour Party, who both in different ways aggravate the situation. The Labour Party will depress production by paralysing the employer and depriving the worker of the help of the capitalist, the Conservatives by pampering the rentier and irritating the worker. I hope that members of our Society will avail themselves of opportunities to make suggestions to the Labour Party when it comes into power.

Mr. J. M. Keynes: I see only two reasons for expediting the repayment of debt. The first is to facilitate the raising of funds on behalf of public bodies which require new capital for productive purposes. The second is to increase the amount of the national savings. The first reason does not hold good always, and I do not think that it is valid at the present moment. In 1920, on the other hand, when the Housing programme was beginning and public bodies were requiring large sums for investment, I saw no harm but much good in the repayment of the debt. More recently the demand from public bodies has been much diminished. I have argued that the maintenance of a heavy Sinking Fund at such a time, in conjunction with the provisions of our Trustees' Act, unduly stimulates the flow of capital into the hands of public bodies abroad. I quite foresee a time arising when there will again be an outlet on a large scale for capital at home, and I think it would be good policy to hasten it by governmental activities on a much greater scale than at present. There would then be a reason for converting the dead weight debt into a productive debt. That would be my criterion rather than the repayment of debt as such.

The other ground, namely, the stimulation of saving, was mentioned by Dr. Dalton. I quite agree with him that by no means all the money which is taken from the taxpayer in taxes for use in the Sinking Fund would be saved if those taxes were removed: whereas, on the other hand, almost all the holders of the debt will re-invest their money when they are paid

off. If, therefore, there is reason for thinking that saving is on an inadequate scale, that is an argument for the Sinking Fund. At the present moment, I believe that the heavy rates of taxation militate against activity and the running of risks, and I do not think that the need for additional savings is so urgent as to justify heavier taxation in order to bring about this indirect stimulation of it. There, again, circumstances might change. But these are the two criteria which I should apply in determining the amount of the Sinking Fund from year to year.

The arguments on the other side seem to me to be partly æsthetic and partly an appeal to the potency of compound interest. For example, the tidying up of the published figures of the national balance sheet seems to make a considerable appeal to some people. Above all, anyone who toys with the National Debt can produce a vivid picture of the accumulations of compound interest after a certain number of years. But although compound interest produces the most visible and impressive picture in the case of the National Debt, it also works elsewhere in the community, and I would look, rather, to cumulative economic progress by the operation of compound interest in the community at large where it is less directly visible. You do not make compound interest more potent because you take money away from individuals and use it in this particular way. The burden of the Napoleonic wars was taken off our shoulders not by a Sinking Fund, but by the general progress of the community in the next hundred years. Now I should be very chary of allowing the apparent burden of the National Debt to induce me to put on taxation so heavy that it might hold back the general progress of the community.

Another reason which often weighs, I think, is the false analogy between the debt of the individual and the debt of the State. There is no real analogy between the two. An individual's motives for clearing himself of debt may apply to the external obligations of the State; but they can have no application to its internal obligations. I think it would be better, therefore, if we were to confine our attention to the two criteria with which I began.

MR. P. D. LEAKE: I have no doubt we should all be agreed as to the desirability of paying the debt off as rapidly as possible, but we must be careful that any method we are adopting with a view to accelerating the payment of the National Debt is not more disadvantageous than advantageous. I gave evidence

some little time ago before the Colwyn Committee, and I suggested that the chief disadvantage of the National Debt is that it nearly doubles the annual amount which we have to pay for taxation, and that is exceedingly bad for industry, because I believe that taxation in whatever form it may be levied, and whether it be direct or indirect, lies ultimately as a burden upon industry.

Now there is no other way of paying off the debt except by means of taxation, and for that reason I think that one must be very careful in increasing the burden of annual taxation with a view to accelerating the repayment of the National Debt. But I pointed out that in the case of a 5 per cent. debt a Sinking Fund equal to one-half of 1 per cent. cumulative will pay off any debt in just under fifty years.

Now, if we could establish a Sinking Fund on these lines, and bind our successors, which I do not think we can effectively do, it would certainly have the effect of producing an atmosphere, a feeling of confidence and security, which is to my mind the bit of cement, as it were, perhaps more important than anything else, for holding together the mechanism of our modern industrial State. If we could adopt a cumulative Sinking Fund on some such basis as that, in the course of a very few years we should be able to effect conversions from time to time—probably more than one conversion—which would restore confidence in the State and would of themselves greatly lighten the annual burden. Our present Sinking Fund of £50 millions is not, of course, a cumulative one. With an outstanding debt of some £7,000 millions, the ½ per cent. would represent about £35 millions. But a strictly cumulative Sinking Fund means that we are burdened for fifty years with the amount of the equal annual instalments, that is to say, £35 millions plus interest, not on the outstanding debt but on the whole original debt. That means we must be prepared to meet heavier taxation in the future. But I think that the operations of conversion as time goes on, following upon the state of confidence which would be produced by the adoption of such a plan, would afford some compensation on the other side. I would not accelerate the Sinking Fund beyond that rate, simply on the ground that we must not burden industry more. I see in all directions that industry is now over-burdened, and for the sake of industry and employment we require to avoid any further burden.

MR. R. G. HAWTREY: My Lord, Ladies and Gentlemen, I

very unfortunately missed the two opening speeches, but there are just one or two remarks that I should like to interpose. Of course, the question at bottom is a question of what is excessive taxation and what are its evil effects. Now some speakers have referred to excessive taxation as putting a burden on industry. I think that is a broad statement, which may be extremely misleading. Certain kinds of taxation are burdens on industry. I would particularly instance local taxation as being a burden especially attached to fixed capital, and therefore discriminating against investment in this country as compared with investment abroad or investment in gilt-edged securities. But that does not really come into the present question, because the burden of local taxation does not arise out of the National Debt. The main burden arising out of the National Debt is the very high direct taxation that we suffer from. Now, I do not believe that high direct taxation can be regarded as a very serious injury, as a direct burden on industry. Industrialists often contend that the burden of income tax has to be passed on in a high price to the consumer. I do not think that I have the time to examine that argument, but I am sure that the great majority of people present here are aware that it is fallacious, and that therefore the real damage of high taxation is to be sought in some other direction. I think it comes out in the form of one of the two injurious effects that Mr. Keynes has referred to—that is to say, the shortage of saving. Direct taxation falls not only on interest, salaries and rents, but also upon profits. Profits account for a very large part of the national income. I do not think it has ever been calculated, but I should say that something of the order of magnitude of 15 to 20 per cent. of the national income represents profits, in addition to what can be regarded as interest on capital employed in industry.

And that fund of profits is the fund out of which savings come, in this and all other countries, and if you impose a heavy burden on large incomes derived from profits, the amount applied to saving is enormously diminished. An income of, say, fifty thousand pounds a year derived from profits is essentially a precarious income. It depends on the good-will of the business, its turn-over; it is very variable, and the recipient has every motive to accumulate as much of it as he possibly can. In that respect it is totally different from the income of the rentier, who has no motive to save out of income. Therefore very high taxation applied to profits cuts off the supply of savings at the source. That is one reason why it is so vitally important to

have a large Sinking Fund, which supplies savings artificially from another direction, and tends to counteract that heavy draft upon profits.

MR. OWEN FLEMING: I think we are very much indebted to Mr. Keynes for bringing the discussion more on to general lines and sweeping on one side the actuarial points, which are interesting in themselves but do not fundamentally touch this point at issue. The point which I would desire to emphasise is the burden of the debt on the country as a whole. Professor Macgregor spoke two or three times incidentally of the revival of trade as if it were something bound to happen and to happen very shortly. I am not so sanguine. Are there any signs at present of any considerable revival in trade? Is there any sign of any increase in our exports? Is there any sign of diminution in the unemployment statistics? Is there any sign anywhere of any considerable improvement in our trade? If so, tell me where it is. Sir, this is really, if I may say so, the point to which we should address ourselves. I dare say some in the room here were at the meeting yesterday of the Bankers' Institute, when Sir Drummond Fraser, with the assent of his colleagues, held the view that from the monetary point of view a Sinking Fund of a million a week would be sufficient to keep matters fairly in order. But, sir, supposing, instead of trade reviving, trade does not revive. What is our position then—because trade has not only to bear the heavy cost of the national expenditure but also of the local expenditure. I do not know whether everyone here has read the figures which Mr. Walter Runciman quoted in the House of Commons on the extra cost of building ships. He worked out the extra productive cost due to various demands of national and local expenditure on each ship. Well, sir, if you read instead of ships, steam ploughs or any other form of manufacture, then it is apparent how by piling burdens on industry you are, as Mr. Runciman says, diminishing our competitive power in the world. I should feel very disappointed about our position were it not that there is some possibility of a solution from an Imperial point of view. I would suggest that the solution of the National Debt question must lie in that direction rather than in any actuarial manipulation by which the burden that we have already to bear of 50 millions a year is to be increased. I submit that 50 millions is the very utmost that the country can stand at the moment. I submit that with the local rates it is too much, and I would suggest that the solu-

tion lies not in these islands but in the resources of the Empire as a whole.

LORD HALDANE: I have listened with great attention to this debate and it seems to me, as most difficult questions do, to come back to a very large question of principle on which it is impossible to arrive at any certain conclusion. The principle, which was touched on in what Mr. Fleming has just said to us, and by some of the earlier speakers, I think, was that your attitude to the Capital Levy and the rapid payment of the debt depends to a considerable extent on what view you take of the future of this country. If this country is doomed never to recover itself, its industry never going to improve, if we are at the end of our advantages and the prospects which we had in the days of the industrial revolution are all gone, then I agree we had better pay off as fast as we can to keep the peace with our creditors. But if, on the other hand, you take the view that we are no worse off than we have been before, that we have got the old stuff in our people, if you take the view that, as put forward in another connection, what you get out of the earth is according to what you have put into it, because of new methods of science and new means of production, then you must remember, with your past experience, to take care to burden industry when it is in a difficult position as little as you can, and to proceed very cautiously in the repayment of your debt. Well, the weak point of that is that the future of this country is uncertain. Many people say that the prospect of a League of Nations points to the prospect of a long period of peace in which we shall be able to do this thing. I hope it is going to be so, but as a student of history, and particularly of the history of the origins of wars, I cannot feel that amount of confidence which would make me wish to put my last pound on that chance.

Ladies and Gentlemen, I think in the discussion to-day two tendencies were revealed. Dr. Dalton based his opening on the footing of quick repayment of this country's debt. That debt is enormous, but it was the price of freedom. He spoke in favour of getting rid of the debt quickly: so did Mr. Hoare, then came Professor Macgregor, who took a view less pressing of the circumstances of the situation, and then came Mr. Keynes, who took what I think was a considerably less pressing view than even that of Professor Macgregor. Of course, we should all like to get rid of the National Debt, if only for the reasons pointed out by Mr. Hawtrey. But if we cannot, is that a thing which should lead us to despair

if we believe in the future of our people—if we believe in the progress which is being made in education, in the outlook of youth, in the rise of the democracy, and in the consequent prospect of greater production and of more industrial power? Well, if you see things looking very depressing just now—and the prospects of industry look very bad—just look abroad and see the conditions of other countries than ours. Ladies and Gentlemen, if you take that view I think you will tend to incline to the go-slow payment of the National Debt—don't be in too great a hurry. If you are in a great hurry, well, you may make the condition of things worse for the industries to-day than they are at present. If you lay stress on the Capital Levy of which Dr. Dalton has told us, remember that it does not look likely to be accomplished quickly.

You sometimes talk as though you had liquid assets, as though there were a balance at the bank on which you could draw. I think the position in particular of those who own land is very difficult. I am practically not a landowner at all, so I do not look at it with any prejudice, but I have had to do with the affairs of people who own land on a very large scale, and I can assure you it is the least liquid of all assets—to try to get a Capital Levy out of land is simply to inflict ruin and almost to drive a certain class of people from home. Well, you may have to do it, to take the land and credit these people with its value, but that won't profit the Exchequer very much. Then, again, there are people whose property consists in the good-will of their businesses, and consequently I am a little comforted when Dr. Dalton says that the Capital Levy is not coming to-morrow. For the rest there is a good deal in what he laid down. Professor Macgregor, moreover, divided the periods into three: first the period in which we should allow for a Sinking Fund, then a short period Sinking Fund, and finally a full Sinking Fund, in which the amount is paid off by including compound interest. Well, after that, my hope is that we shall be rather better off. Anybody who has read the records of the post-Napoleonic wars period knows that this country will probably revive again. Let us then have courage, let us have faith, and let us put our full energies into developing the productive capacity of this nation.

SAVING AND THE MONETARY SYSTEM

In a previous paper in the ECONOMIC JOURNAL on "Individual and Social Interests in relation to Savings" the writer dealt with a state of uniform growth of wealth and population.[1] For simplicity it was supposed at first that there were no individual savings or purchase of capital values and that a State bank provided all money for production and received the rental values of goods hired. It was further pointed out that, if individuals saved, in the aggregate, at a rate which always equalled the amount required for financing increase, as distinct from purely maintenance production, the result was just the same for the non-saver, but so far as savers were concerned, there would be the advantage that any individual could save and subsequently spend interest and capital, but the community would not be disturbed so long as the total of savings was maintained at the rate required for financing growth of wealth.

It is now proposed to go on to some consideration of a non-uniform rate of growth and to make some comparison of the conditions under a system of private banking with the purely theoretical side of things which was postulated. There are, however, certain points on which something should be said before dealing with these questions.

1. Growth of wealth has been regarded as due to corresponding growth of population. Suppose, now, it is due to the increasing productivity of labour, with, at first, a constant population. The increasing productivity may be the result of improving processes, or of economies of large-scale production, or of the conjunction of the two.

[1] The smooth state of growth depicted implied an absence of foreign trade: if there were foreign trade, and the money paid out for production might be spent by the wage-earners in purchasing foreign goods, the maintenance of a uniform level of prices would be possible, of course, only if the proportion of money spent on foreign goods and the prices of such goods remained uniform, and if foreign demand for the goods of the country under consideration grew at the same rate as their production. Any disturbance arising out of conditions abroad would reflect in some degree on conditions at home. That, however, is not a subject included within the scope of the present or the previous paper.

Under actual conditions, increasing productivity does not affect all kinds of production alike, but we can consider the fundamental questions on the supposition that the improvement applies equally to all production, and continues at a uniform rate.

We can suppose our State to pay wages on a kind of piece-work basis, so that as output grows all wages are increased *pro rata* and production costs as a whole remain constant. We can make the further supposition that demand grows uniformly.

If, under these conditions, the rate of growth is, as before, r per unit of time, the rate of interest will also be r, and the money supply must grow at the same rate. In fact it makes no difference whether increased production is due to the same number of people producing more, or to an increased number of people producing each at an unchanging rate.

It is obvious that, as regards money supply required, and spent, it is just the same whether growth takes place by the advent of an *additional* producer, B, producing a quantity of product p, and paid in proportion, or as the result of the original producer A producing an amount p in excess of his previous production, A being paid *pro rata* with his production, and B now non-existent. In each case we are assuming that the wage is spent in hiring current utilities. The amounts of product being currently produced and the amounts of money currently spent are the same in the two cases, and the reasoning of the previous paper as to the rate of interest applies equally to the two cases.

2. There has been assumed hitherto to be no perspective discounting of the future merely as future. Under the Socialist régime that might be assumed to be the attitude of the State, but, on the other hand, it might not be. We can consider this factor without as yet departing from our convenient hypothesis.

In an unchanging State, merely maintaining a uniform state of wealth and population, if the future were discounted at the rate r there would be the same relative hiring prices and the same relative distribution of stocks of goods in existence as previously in a state of growth at the rate r without perspective discounting. The State would obtain interest on expenditure for such things as houses, but, *ex hypothesi*, would be using the interest for purchase of current services of part of the population.

It is not necessary to inquire, in this case, whence comes the money to pay the interest. It is assumed that the necessary volume of money is in existence, and it does not require to be

increased. There is, however, a considerable difficulty when we combine the conditions of a rate of growth r, and a rate of interest which exceeds r, by reason of the influence of discounting the future. Instead of there being an expenditure of new money for increased production which, being received as wages and spent on hiring current utilities, kept up a price-level resulting in interest at rate r, there is now a direct expenditure of interest on current utilities, which should make the hiring price-level greater than it would be if interest were only at the rate r.

We may suppose a rate of growth r_1, the financing of which tends to produce a rate of interest equal to r_1, and if the marginal rate of discounting the future does not exceed r_1, there does not appear to be any reason why the rate of interest should be any greater. The State can get the rate which makes up for this discounting.

When we are considering a régime of individual saving, however, the position is likely to be different. In considering whether to save and invest £100 a man is not influenced solely, or even mainly, by purely perspective discounting of the future merely because it is the future. If his income is otherwise uniform, £100 subtracted from this year's expenditure is not adequately compensated by £100 added to next year's expenditure, owing to the diminishing marginal utility of income. This is not properly to be called purely perspective discounting of the future. It is a perfectly rational thought and has nothing to do with the weak-mindedness of Esau.

The individual may regard the future as neither more nor less important, *per se*, than the present. This influence of diminishing marginal utility, however, is the predominant factor in influencing the supply side of saving, and for want of a better phrase may be called discounting of the future.

Where saving is dependent on individual effort, the amount of it is necessarily limited by this factor and a rate of interest may be required which exceeds the rate of growth of wealth, and especially is this the case if wealth is not very evenly distributed.

Suppose the rate of growth of wealth to be r_1, but the rate of interest has to be at a higher rate, r_2, to call forth the necessary degree of saving in an individualist régime,[1] and r_2 is greater than r_1.

It is not easy to prove conclusively how capital and hiring values would be affected, but a useful line of approach is as follows.

[1] This factor might also be present in a Socialist régime, but we are more familiar with it in connection with individual saving.

Compare two States, S_1 and S_2, similar in all respects, and both growing uniformly at the rate r_1, but not in any economic communication with one another. In S_1, however, there is (for purely psychological reasons, perhaps) no discounting of the future which raises the rate of interest above r_1. In S_2, on the other hand, the interest rate is raised to r_2.

The two States have both been growing in population at the same rate, r_1, are equally industrious and produce the same products, but not in the same relative proportions. Statistically their aggregates of wealth existing at any given time may, therefore, be equal, provided that everything is included. We can make the assumption, therefore, that this is the case, and consider what, on that assumption, would be the comparative position in other respects.

Call the total of various products existing, at the selected time, in S_1, P_1, P_2, etc., and in S_2, P_1', P_2', etc. Taking, as in the previous paper, a unit of each product as that which has unit value, the aggregates of capital wealth are $P_1 + P_2 + P_3$, etc., and $P_1' + P_2' + P_3'$, etc., and the quantities of money in the two States are such that their totals are the same. In S_1 there is spent, on current hiring of goods, only the total of wages currently spent in production, and this is also equal to the total of interest, at rate r_1 on existing capital.

If we now assume that in S_2 there is the same amount of money spent on wages for production as in S_1, that is equal to the aggregate of interest at the rate r_1 on the existing capital values in S_2 as well as in S_1. If that amount were saved (by the State or by individuals) it would enable the system to go on without either excessive or deficient creation of money to maintain a uniform price-level.

There also is earned, however, interest on existing capital in excess of the rate r_1, *i.e.* the difference between the rate r_2 and the rate r_1. If this excess is not saved, but applied directly to purchase of current utilities, then the aggregate of money being so applied, this interest and current wages together, equal a rate r_2 on the total of existing capital in S_2.

This gives a level of prices of current utilities such as would exist if the current rate of growth were r_2, and would, in accordance with the argument of the previous paper, yield a rate of interest r_2 on money spent in production, and this is the rate of interest which is required by the initial hypothesis.

The assumption, therefore, that with aggregate capital values equal in S_1 and in S_2, the amount of money paid out as wages in

S_2 is the same as in S_1 and equal to interest at rate r_1 on existing capital values, works out consistently. In order to make any comparison between S_1 and S_2 we have to make an assumption somewhere as to relative volumes of money, or relative prices, and the simplest thing is to assume money supplies such that the aggregate of capital values is the same in the two States. Starting with that, the only further supposition which will give consistent results is that the wages paid out are the same and equal to a rate r_1 on existing capital values and that the excess of interest is spent in S_2.

We have not, however, really succeeded in constructing a hypothetical State in which there will be smooth and uniform growth of wealth at the rate r_1 consistently with a rate of interest r_2. If the growth of money is only equal to a rate of interest r_1 on the existing capital values, it will not enable the higher rate r_2 to go on being paid on the increasing capital. We can suppose, at the starting-point, sufficient money in existence to be consistent with a price-level which yields this rate of interest, but when capital and population and wages are doubled, the flow of money income will not have been doubled unless some means of increasing it exists in addition to the creation of money required for paying wages for the increase of production. The State bank régime might solve that problem if it were desired, but a system of private banking cannot go on systematically, and with smoothness, advancing credit in excess of the normal rate of saving, which we have supposed equal to a rate r_1 on existing capital values.

The writer is unable to see how any theoretically smooth system of growth can be devised which would be consistent with a continual rate of interest in excess of the rate of growth of wealth. The case appears to fall under that of non-uniform growth, to be discussed later.

3. We were supposing that the State bank simply paid wages and salaries to producers, but that is not at all essential. We can quite easily suppose that production is carried on by entrepreneurs who simply obtain loans from the State bank. So long as the entrepreneurs' profits are income, which they can only spend on the hire of current utilities, the position is essentially the same as if they were paid salaries as managers of production, only the State bank would be continually making loans, analogous to loans of private banks, and being repaid.

The ownership of wealth would be, in effect, in the hands of the State bank under these conditions; it would be the con-

verse case to that in which individuals, by saving and depositing in the State bank, acquired a mortgage equal to the whole value of wealth existing, the nominal ownership only being in the hands of the bank. On the present hypothesis the entrepreneurs would nominally be the owners of wealth, but the State bank would have a mortgage equal to the value, excepting for a margin representing the profits necessary to attract a sufficient number of competent persons. These profits would be income, and spent as such, and would differ in individual cases according to the ability and luck of the individuals, just as fixed salaries for management might differ. A builder might borrow £10,000 and erect buildings which would let at a rental of, say, £800, out of which repairs must be provided for. He may make a profit out of the transaction, but the real capitalist is the State bank, which is entitled to the repayment.

Such repayment would be made over a long period of time, as the rents were received, but if we regard the builder as continually in business, this business growing at the same rate as wealth and population in general, he would, at any moment, be making new loans and repaying old ones with interest, and the two things would equate, so that the loans might be regarded as a succession of loans of brief duration, continually repaid with compound interest and continually renewed. In practice, no doubt, there would be some convenient interval for reckoning, such as six months, and the amounts of new loans for any one individual would not always exactly equal what he was due, at the moment, to repay.

This approaches nearer to actual conditions, and a further approach is made if we suppose that there is a gold standard, but that a large proportion of payments are made by cheque. The State bank then gives the entrepreneurs credits, like an ordinary bank, and the entrepreneurs have current accounts, for convenience merely but without interest allowed. These deposits are, to the bank, liabilities, offset by a corresponding entry on the assets side.

The fact that every loan involves an entry on the liability side of the account is not in the least incompatible with the fact that the value of capital owned by the State bank increases *pari passu* with these extensions of credit. So long as there are no individual savings, the State bank maintains the virtual ownership of all wealth. It is simply the absence of individual saving which is the condition necessary for this result.

4. We have to ask whether the conditions are very different if

we have a system of private banks. Could they, in the absence of saving, and consistently with a gold standard, simply replace our hypothetical State bank, and maintain the growth of wealth, themselves becoming the virtual owners of all new wealth as it was produced? Theoretically they could do so, not only when credit is extended by book entries, without very much use of actual gold, but even if payments are all in gold and the mining of gold is carried on by men who are not dependent on the banks for credit. This is possible, however, only on the assumption, which is rather inconsistent with a régime of private banking, and individualism generally, that individuals do not or cannot do any saving themselves.

5. The questions arising are more complex, however, if we ask what happens when there is individual saving, but not to an extent which would suffice to finance a uniform rate of growth of wealth, and if one also ask what happens if growth is not uniform—*e.g.* if it is accelerated.

These two questions are not quite so separable from one another as might at first sight appear, but it is convenient to deal with the last-mentioned question first, namely, the effect of an acceleration of the rate of growth. In view of what has been said above, it is hoped that the reader will not think it useless to discuss the question under the hypothesis of a monopolistic State bank, which has some advantages from the point of view of simplicity of conditions.

Suppose that, under the Socialistic régime, with no individual savings, it was desired to increase the rate of growth, which had previously been at the uniform rate r.

On the principle of taking the simplest case first, we are not at present to assume that some new invention has rendered this possible by merely getting more results from a given amount of labour. We can suppose that there has been an acceleration in the growth of population, or an influx of immigrants.

An increase in the current rate of production is then simple enough, and if the level of money wages is not to be altered, the necessary increase of money to be paid out as wages is provided by the State bank. This will necessarily alter the level of prices, however, both the average level and the distribution of relative prices.

Suppose, in the first place, that the increased labour supply is distributed uniformly over all kinds of production, increasing current production by the same percentage everywhere. The periods required for production of different classes of goods are different, and for that reason alone the supply in the market,

available for hiring, will very soon be greater in the case of goods whose supply is quickly capable of increase, than in the case of those of which the production period is longer.

In a still greater degree, however, the difference in relative durability of the product must give rise to alteration of prices. Take buildings, for instance. In consequence of their durability in use the stock in existence at any moment is very much larger than a year's output of new buildings; the reverse is the case with coal. Add the same percentage increase to the rate of current production of each, and you do not get anything like the same percentage increase in the total supply of houses and of coal, respectively, ready for use.

Moreover, in the case of houses, if an extra million pounds be spent in a year in adding to the number of the houses ready for use within the year, or in less time, that money is not, on our supposition, spent by the wage-earners in buying houses, but only in hiring them, and it is not until the total stock has increased by an amount which would represent a *letting* value of a million pounds per annum at the original rents, that a position would be reached in which the demand would stabilise rental value at the original figure—and even so it is on the supposition that, from this new level of stocks of houses and corresponding increase of everything else, the accelerated rate of growth continues now to be maintained and becomes a new uniform rate of growth. If, once this new level of stocks has been reached, the rate of growth is to fall back to the original rate, there will be a retardation of the rate of growth and a reversal of the price-movements. That, however, we are not going into just here. The point is that an acceleration of the rate of growth must, for a substantial time, involve both an increase of average prices and a disturbance of general prices, if uniform rates of money wages are paid all the time. It is not difficult to infer that a retardation must result in falling prices and a disturbance of relative prices, but the latter differing in kind from the effect of an acceleration.

During an acceleration, prices of relatively durable goods, or of goods with a relatively long period of production, must be raised more than those with the opposite characteristics. For brevity, in future, we may refer to both the long-period production goods and the durable goods together as simply "durable goods,"[1] since for most purposes which we have under

[1] It may be objected that there is no clear distinction between the production of durable and of non-durable goods—that coal, for instance, requires

discussion at present there is no important difference between the two. In both cases there is simply a delay between performing the labour of production and obtaining the *whole* of the resulting utility.

The point that there can hardly fail to be, during the period of acceleration of growth, an increase of average prices, provided that uniform wages are paid, requires, perhaps, to be emphasised, especially as there is now much discussion of the possibility of stabilising the level of prices. It is not difficult to understand that in so far as time is required to get things produced, accelerated production may lead to temporary increase of price-level if extra wages are paid to producers who spend them before the goods are on the market. It seems to be assumed, however, very commonly, that once the increased supplies of goods are marketed, prices fall back to the previous level, and the period of production is not, on the whole, very long. Regard must also be had, however, for the considerable class of goods which, when produced, are durable and of which the stock is large in relation to annual production.

It may be objected that this argument is dependent on the supposition of no private saving and State bank financing of industry. The State bank does all the saving, by saving the interest on money spent on production, and it obtains this interest only through the level of prices. It cannot, therefore, accelerate its savings until first of all, through increase of prices, it has got more interest to save.

The situation is not, practically, however, so very different

for its production shafts and galleries and machinery which both take a considerable time to produce and last a long time, and a permanent increase in the output of coal would involve a corresponding increase in the supply of the comparatively durable capital goods.

That is true, of course, not only of coal, but of almost everything, including personal services, such as those of actors, teachers, domestic servants, whose services are connected with the supply of theatres, schools and dwelling-houses.

It is always possible, however, to increase, at any rate temporarily, the immediate output of coal, acting, teaching and domestic service without a corresponding immediate increase of fixed capital in proportion, and further there are differences of degree in which the supplies of things and services are associated with durable capital goods. It seems quite permissible, therefore, to make a broad distinction between the increase of production which gives its full or substantially full result quickly and production which does not give its full result quickly.

In any event it is to be observed that the following argument as to disturbance of *general* prices is not dependent on the supposition that there are *differences* between classes of goods in respect of period of production and durability. That supposition only bears on the argument that there would be alteration of *relative* prices.

under a system of private saving. Suppose that the normal rate of growth has been financed by savings, but an accelerated rate of growth is started as before, by first of all an advancing of money to additional producers as wages. There is an addition to total money income, and if the same percentage of income is saved, there is an immediate increase of saving, an acceleration of saving, one might say. That does not suffice, however, to prevent an increase of prices. The simplest way to illustrate the point is to take the case of time required for production, and for the moment to disregard the question of durability of goods when produced.

If we take two successive periods of time, within which accelerated growth of production is going on, but no product available for consumption is yet obtained from the additional effort, the position may be represented as follows.

	Income.	Saving.	Spending.
Time 1	100	20	80
Time 2 { if normal growth . . .	105	21	84
Time 2 { if accelerated growth . .	110	22	88

Products actually available for use have increased in the interval only from 80 to 84, because, if uniform growth had continued, products immediately available would have increased just as fast as spending, and this amount of increase of available utilities does occur, but spending has increased to 88. If no increase of prices is to occur, saving would have to increase to the extent of the whole increment [1] of money spent in production, and as goods come on the market saving would have gradually to diminish from the abnormal rate at first necessary.

Before considering further, however, conditions approximating to those actually existing, let us ask first what would be the effect, under the Socialist régime, if the additional productive power were not distributed evenly over all kinds of production, but were concentrated in a special degree on the more durable class of goods, as it should be if the disturbance of *relative* prices is to be minimised. To accelerate the growth of the total supply in existence of houses would require a much greater increase of current production than would be required to accelerate, in the same degree, the supply of many other classes of goods. At best, however, the total stock of houses in existence could not be made to increase at the accelerated rate at once, but the lag could be diminished by concentrating

[1] That is to say, the increment which is due to the increase of the rate of growth over and above the previous uniform rate. Total saving must at each moment continue to equal total of money applied to finance *growth* of production.

labour for a time on production of houses and similar durable goods in a special degree.

The disturbance of relative prices would not be so great as before and would not last so long, but the increase of general prices would be greater whilst it lasted, since there would be a less rapid rate of increase of the less durable goods and a larger proportion of people being paid wages (and spending them on currently available utilities), whilst not producing a corresponding immediate increase of such utilities. There would be no avoidance of a disturbance of price-level by this means.

The most frequently occurring case of acceleration of production is the bringing into full activity of the unemployed or partially unemployed during a revival of trade activity following a depression. The argument that an increase of average prices is practically inevitable would seem to apply, even apart from any increases in the current time rates of wages, or the setting up of those self-perpetuating cycles of speculation which, as is well recognised, tend to exaggerate any rise of prices which has once set in.

Let us consider now how prices would be affected under the Socialist régime in the case of an acceleration of growth not due to an addition to population, but rendered possible by improvement in the methods of production, so that the population, growing at the normal rate, can increase their average output.

If the uniform rate of money wages continued to be paid. there would be, of course, a progressive decline of average prices as improved methods took effect. Superimposed upon this general movement, however, there would be a fluctuation arising out of any change in the rate of growth supposed to be occurring at any particular time, even if one assume that the improvement of production applies equally to all kinds of production.

If wages were paid, however, in proportion to current output, the effect of an acceleration of growth on prices would be just the same as in the previous case of accelerated growth of population.

In pursuing any deliberate policy of maintaining uniformity of price-level, disturbance of prices arising out of variations in the rate of growth of wealth has to be distinguished from disturbance due to inflation of money pure and simple. In theory there is the distinction, but in practice any distinction would not be so easily made. In a sense one might say that there is no distinction. If more money is being paid out to increase

production of buildings, etc., and the spending of it before the full result is ready raises prices of commodities in general, there is, in a sense, money inflation, but there is an important difference between that and the further inflation which is liable to follow as a result of speculative anticipation, with the self-perpetuating vicious circles which are now well recognised. Any scheme for controlling price fluctuations must endeavour to avoid stopping those fluctuations which are inevitably associated with acceleration of growth.

This discrimination is seen, however, to be a difficult thing if we have regard to actual conditions of private property and banking. The theoretical State bank could disregard any failure of private savings to keep pace with the needs for financing growth of wealth and could itself become the owner of increasing wealth in so far as individuals failed consciously to save. The State, in fact, imposes the necessary rate of saving through an enhanced level of prices for a given level of money wages. With a system of private banking something of the same kind can happen, but not quite in the same way. A number of separate banks (especially when we have regard to the fact that there is foreign trade, and they are only part of a world system) cannot take the risk of lending money for production of durable goods for any length of time, unless they can rely upon individual savers relieving them of such loans by buying up the buildings or mortgages or shares in companies, etc.

Growth, however, is not, in fact, limited to the rather slow rate which would be permitted if it depended entirely on what we may call ordinary savings out of ordinary earned income, or out of income from savings previously made out of such income. If we try to imagine the theoretical perfectly uniform level of prices lasting for a long time, and no great new inventions, it seems difficult to suppose that the rate of saving would suffice for any such rapid rate of growth of wealth as has, in fact, been experienced in progressive modern communities.[1]

What actually happens is that there are spurts of rapid growth, with extension of credit beyond the current rate of saving, and rising prices, which enable clever and fortunate men to make much more considerable gains than they would be able to do if prices were uniform, and they save a large part of such gains, and in that roundabout way the aggregate of savings is made sufficiently great, taking the period of the boom and the

[1] For the United States the rate of growth since 1875 has been estimated as about 3½ per cent. per annum. *American Economic Review*, Dec. 1924, p. 702.

depression together. It was not purely by normal savings that the rapid growth of wealth in England and America during the nineteenth century, in Germany from 1870 to 1914 was financed, but largely by extension of bank credit in excess, for the time being, of normal saving, resulting in periodical inflations. If the level of prices is to be kept much steadier, and if, in addition, there is to continue a high rate of super-tax and of death duties, there is real danger that the rate of growth of wealth might become very slow unless some other way of providing for it can be found.

This is the most important practical consideration to which the discussion leads. The "capitalist system" has imposed a fairly rapid rate of growth in developed communities, but through a high degree of inequality in the distribution of wealth, and by a financial system which tends to prevent the destruction of that inequality, by way of periodical inflationary periods. There is now a strong attack on the inequality of distribution through the system of taxation and much discussion, at least, of methods of checking the monetary fluctuations. The question how growth is to be maintained at a good rate requires also to be tackled, and, be it remembered, so far as this country is concerned, the growth of the outside territories, from which so large a part of our supplies is obtained, is included in the problem, because hitherto their growth has mainly been dependent on the supply of British capital. If the community determines not to allow the accustomed rate of growth to be forced upon it in the old way, or not to the extent which prevailed until recently, it has to be seriously considered whether there is any really practicable alternative other than a substantial slowing down of the rate of growth of wealth.

C. F. BICKERDIKE

THE PLURALITY OF INDEX-NUMBERS

In the light of recent writings about index-numbers I propose to reconsider an old question, namely, whether the formulæ which purport to indicate change in the value of money are all of one type, or admit of diversities adapted to different purposes. The inquiry follows an antique method which Sidgwick regards as appropriate to economics, search for definitions.[1] It is understood that in the words of Whewell, approved by Mill, "there is a tacit assumption of some proposition which is to be expressed by means of a definition and which gives it its importance."[2]

I propose to define an[3] index-number as a number adapted by its variations to indicate the increase or decrease of a magnitude not susceptible of accurate measurement. This generic definition appears to be in accord with the conceptions of high authorities.[4] Not many agree with Mr. Correa Walsh when he conceives exchange-value as a magnitude which is to be measured by an index-number with as much and the same kind of precision as length by a yard-stick.[5]

There is more difference of opinion about the species into which index-numbers relating to prices are to be divided. I attempt to indicate the validity of three conceptions which have not obtained general recognition.

[1] *Political Economy*, Book I. ch. ii. § 1.

[2] Mill, *Logic*, Book IV. ch. iv. § 4.

[3] An index-number "proper," as we may say in contradistinction to the sense in which the term is sometimes used by high authorities to denote a mere ratio between two given quantities.

[4] According to Bowley, "Index-numbers are used to measure the change in some quantity which we cannot observe directly, which we know to have a definite influence on many other quantities which we can so observe tending to increase all or diminish all" (*Elements of Statistics*, Part I. ch. ix.). So Keynes distinguishes the case in which "we seek to build up an index-number of a conception, which is quantitative but is not itself numerically measurable in any defined or unambiguous sense, by combining a number of numerical quantities which, while they do not measure our *quæsitum*, are nevertheless indications of its quantitative variations and tend to fluctuate in the same sense (*Probability*, p. 213, par. 2. Cp., *ibid.*, par. 3).

[5] *The Problem of Estimation* (1921), pp. 112, 117; cp. *Measure of General Exchange Values*, p. 9 *et passim*.

A.—*Index-numbers representing Welfare*

Many, perhaps most, index-numbers are rightly conceived as involving quantities no less objective than the matter of the classical economics. So Irving Fisher seeks a "measure of objective purchasing power,"[1] and finds it in his celebrated equation of exchange.[2] Objective too is Professor Gini's treatment of the problem[3] as an instance of "elimination" of the kind which is effected by the device of a "standard population" designed to abstract the influence of particular age-distributions on the rate of mortality. These conceptions, respectively akin to Professor Foxwell's "currency standard" and Giffen's investigation of "changes in the value of Foreign Trade,"[4] are to be distinguished from the index-numbers which purport to indicate the "cost of living" with the view of securing to consumers a constant value in use.[5] We may indeed construct a "cargo" of goods definite in quantity and quality,[6] the varying values of which from time to time shall constitute a series of index-numbers. But even in starting with such a cargo we are no longer on the *terra firma* of perfectly objective quantity. For in the selection of the assortment forming the cargo there must be some regard to utility. At any rate, to continue the metaphor, when we have put out to sea, the composition of the cargo suffering a sea-change, we have to abandon the *primâ facie* exact method of comparing prices and to substitute the more indefinite procedure of comparing amounts of satisfaction.[7] So Professor Bowley, with reference to a period in which there had occurred considerable changes in the prices and quantities of commodities, would compare the "satisfaction" obtainable from different combinations of commodities at given prices. To measure the change of "that vague entity the cost of living," the opinion of representative house-wives would be preferable to the formulæ of mathematical statistics.[8] Professor Gini too admits that there is a "pouvoir

[1] *Purchasing Power of Money*, p. 221.

[2] *Ibid.*, p. 196 and context. Cp. *Making of Index-numbers* et passim.

[3] *Construction des nombres indices des prix*, *Metron*, Vol. IV. v. 1 (1924), p. 25 *et seq.*

[4] As exhibited by the present writer in the Memoranda republished in his *Collected Papers* (1925), pp. 261–3 and p. 264 *seq*.

[5] *Ibid.*, p. 208 *seq.*

[6] Irving Fisher, *Amer. Stat. Assoc. Journal*, 1923.

[7] The proposition is taken almost verbatim from Sidgwick, who is quoted more fully in the *Economic Journal*, Vol. XXXIII. (1923), p. 344.

[8] *Ibid.*, where the reference to Bowley should be: "Journal of the *Statistical Society*, 1919, Vol. LXXXII. p. 351," not as now printed in the ECONOMIC JOURNAL. With reference to the statement in the text about Professor Bowley's views, see also his article on the "Cost of Living" in the ECONOMIC JOURNAL, Vol. XXX. (1920), p. 117.

économique d'achat de la monnaie," corresponding to "les satisfactions ou le bien-être qu'une unité monétaire peut procurer," which, except in the simpler cases, does not lend itself to the objective method of elimination. When the economic purchasing power at the present time is compared with what it was in a remote age we must be content, he thinks, with a very rudimentary index-number.[1] As an instructive example of such a comparison I subjoin an extract from the earliest treatise on index-numbers and one of the best, as Bishop Fleetwood's *Chronicon Preciosum* may be described. It will be recollected that an unusually scrupulous Fellow of All Souls had asked the Bishop whether, although possessed of an estate of £6 per annum, he could conscientiously swear to observe the statutes of his college according to which a Fellowship was to be vacated if the Fellow had an estate of £5 per annum. Fleetwood justly decides that "the Founder intended the same ease and favour to those who should live in his college 260 years after his decease, as to those who lived in his own time."[2] Fleetwood not only compares the prices of bread, drink, meat, cloth, books, even degrees, at the respective periods; but he also derives a more general measure of economic welfare from stipends, salaries, wages, etc. Whereas the Founder as Archbishop of Canterbury had confirmed certain regulations strictly limiting the stipend of parish priests and other clerks, Fleetwood argues: "You may therefore very reasonably conclude that about that time [1439] a single man might live decently and cleanly, with good management, with VI £ per an., because it is not to be presumed that an Archbishop, at the head of his Clergy and at their request too, should decree such an allowance as would not keep them (if virtuous men and sober) decently and cleanly."[3] The requirements of a celibate clergyman seem, indeed, to form a pretty constant unit of welfare considered as including not only material satisfaction but respectability. Fleetwood was aware that such a unit could not be fixed with the precision of a commercial account: "altho' a *Pound* in Henry VI's time might be worth 5 or more in our own [Queen Anne's] times, yet it was not worth 20 or 30." Greater precision is no doubt attainable in modern times by means of our more accurate statistics.[4] But it must not be forgotten that index-numbers for cost of living based

[1] *Loc. cit.*, p. 144. Cp. p. 20. [2] *Op. cit.*, p. 9. [3] *Op. cit.*, p. 113.

[4] On the use of statistics with reference to psychical quantity some remarks are offered in a Paper closely related to the present article, and published almost contemporaneously in the *Journal of the Royal Statistical Society* Vol. LXXXVIII. (July, 1925).

on the principles explained by Sidgwick and Bowley have not the objective character of nautical tables or reports of yesterday's weather. Though compiled officially and by authority used to regulate wages or other payments, such index-numbers should claim only that kind of assent and compliance which is due to rules of taxation which, once regarded as objective, are now, as Sir Josiah Stamp observes, "becoming subjective." The sort of μετρητική to which I call attention is well illustrated by the following extract from Marshall's *Principles.*[1] "If there are a thousand persons living in Sheffield and another thousand in Leeds, each with about £100 a year, and a tax of £1 is levied on all of them, we may be sure that the loss of pleasure or other injury which the tax will cause in Sheffield is of about equal importance with that which it will cause in Leeds."[2]

Marshall's postulate of a homogeneous population would not commonly be fulfilled by cases for which the maker of index-numbers has to prescribe. In this respect we are at a disadvantage similar to that which attends the use of *Consumers' Surplus* with reference to a community in which wealth is unequally distributed. Our calculation is indeed even more imperfect than that of *Consumers' Surplus ;* just because it relates not to surplus, but to that which is the antithesis of surplus, value-in-exchange. In this respect the construction of an index-number representing welfare is on a par with the measurement of national income by the summation of money values. Income, as Professor Irving Fisher well teaches,[3] is in the last analysis a stream of consciousness, a stream of satisfactions, of which the counterpart is a stream of services impinging on the senses. But, to amplify the metaphor, it is only the superficial extent of the subjective stream, only marginal utility which is represented by a monetary index; the depth consisting of surplus other than marginal utility is not adequately represented by value-in-exchange. The real national income, or that portion of it which attends the expenditure of an assigned amount of money, might vary without any variation in our index-number. We have only an index, not a measure, of economic welfare.

[1] *The Principles of Taxation*, p. 17. The modern practice dates from Mill's doctrine of "sacrifice"—"human wants and feelings"—as the criterion of taxation; *Pol. Econ.* Bk. V. ch. ii.

[2] Cited by the present writer in his *Collected Papers*, Vol. III. p. 66.

[3] *Nature of Capital and Income*, p. 168, p. 326 *et passim*. Cp. *The Rate of Interest* (p. 90): "Income ultimately consists of the stream of consciousness. Or if we prefer to stop just short of this subjective income we may say that income consists of the objective services which impinge upon our persons and are on the point of producing the subjective effect of consciousness."

B. *Unweighted Index-Numbers*

The popular term "unweighted" is here used to signify weighted on some other ground than the total value, the amount of a commodity used multiplied by its price. The term may include weighting according to "precision" in the sense in which that term is attributed to errors of observation; a sense in which the price of pepper might deserve more weight than that of cotton, as M. Lucien March has the courage to maintain.[1] Another kind of weighting suggested by Professor Gini, according to the stability of the utility afforded by a commodity,[2] would also theoretically be admissible. The unweighted (like the weighted) index-number has two sides, objective and subjective. Both presuppose a fairly uniform change in the price of commodities, a sporadic distribution of price-relatives about their mean.[3] With the aid of this fundamental datum—which we will label (α)—may be inferred either (β) some particular objective cause, or (γ) a change in the amount of money that on average corresponds to a unit of satisfaction or "genuss-einheit." [4]

In either of these aspects the unweighted index-number seems to be out of favour with statisticians at present. One high authority, Professor Allyn Young, describes it as a "fictitious mean," likening it to the figure which would be obtained by averaging the proportions of the gainfully employed in the different American States.[5] So Professor Gini objects that we might as well speak of an average rate of mortality at different ages.[6] But there occurs this difference, that through the action of supply and demand in a régime of competition prices in different spheres of industry, when affected by a common monetary cause (*e.g.* augmentation or withdrawal of paper-money), tend to go up or down together. Whereas, if there occurs a change in the rate of mortality at one age there is not a like tendency for that change to become general—persons of a different age will not in view of that change become more willing to accelerate, or able to retard, their own decease.

Professor Gini's objections appear to be specially directed

[1] *Metron*, Vol. I. ix. (1921), pp. 81, 89. Cp. Edgeworth's *Collected Papers*, pp. 236, 244, 247, 287.

[2] *Loc. cit.*, p. 143.

[3] Cp. *Collected Papers*, pp. 196, 233, 287; and ECONOMIC JOURNAL, Vol. XXXIII. (1923), p. 346.

[4] Cp. *Collected Papers*, Vol. 1. p. 210.

[5] *Quarterly Journal of Economics*, Vol. XXXV. (1921), p. 563. Cp. p. 557.

[6] *Loc. cit.*, p. 58.

against the subjective side of the unweighted index-number.[1] But we are concerned to show that they are not fatal to either species. Part of his argument turns on statistical technicalities, the correlation of price relatives, the degree in which their distribution corresponds to the normal law of error. These objections are considered in the companion to the present article which appears in the *Journal of the Statistical Society*.[2] Suffice to it repeat here that the objection might equally be urged against an argument which is considered a perfect type of statistical induction : [3] the discovery of the diurnal variation in the height of the barometer which Laplace obtained by comparing the average height of the mercury at different hours of the day. There is certainly much correlation between meteorological observations on successive days in our climate; and the observations on which Laplace based his reasoning were very far from being normally distributed. In this instance then the statistical condition forming our fundamental presupposition (a) is fulfilled. But when we go on to inferences it must be admitted that scruples such as those which Professor Gini has expressed are legitimate. For, as Mr. Keynes has insisted, statistical induction stands in need of some finite, however small, probability derived from some source other than the observations themselves, some *a priori* presumption.[4] An adequate *a priori* probability is found by Laplace in the variation of the solar heat with the time of day.[5] So with reference to a series of barometrical observations designed to evidence the existence of atmospheric tides he appeals to the known attractive forces of the sun and moon.[6] But in the case before us it may often be questioned whether the requisite *a priori* probability is present. Let us look at some particular cases.

Suppose with Mill that everyone in the community were to awake one morning with the money in their possession increased in a certain ratio.[7] It can hardly be doubted, it was not doubted by Mill or Hume, that there would tend to be a general rise of prices. Coming nearer to reality, suppose that Jevons had carried his proposal to reduce the value of the sovereign by 2*d*. (for the sake of international parity), but had failed to carry his supplementary plan of masking the change by means of a seignorage.[8]

[1] *Loc. cit.*, p. 16 *et seq.*
[2] Vol. LXXXVII. (July, 1925).
[3] Cited by Mill, *Logic*, Book III. ch. xvii. § 4.
[4] *Probability*, pp. 238, 295, 300 *et passim.*
[5] *Théorie analytique des Probabilités*, Book V. ch. v.
[6] *Mécanique Céleste*, IV. v. § 44.
[7] *Political Economy*, Book III. ch. viii. § 2.
[8] *Investigations in Currency and Finance*, p. 246.

The action of competition would surely have brought about a slight rise in prices not necessarily to the amount of 2*d.* in the £, but still an ascertainable [1] and general rise of prices on average. A more concrete instance is afforded by a change in the rate of interest diffused over the prices of securities. Mr. Edwin Frickey very properly prescribes an unweighted index-number as suitable for this case.[2] As a case more nearly on the line may be recalled the argument of the Bimetallists, well put by Mr. L. L. Price,[3] who, writing in 1896, finds it "impossible to doubt the existence of a causal connection between the recent fall of prices and the monetary changes of the last twenty years."

So far of an objective cause, with reference to our head (β). On the subjective side (γ) I am not concerned to parry all Professor Gini's thrusts. The fulfilment of our condition (a) may not always, over long periods or after violent changes, justify the proposition that there is a fairly uniform change in the marginal utility of money. I am almost content with our author's admission: "Dans des conditions normales et d'équilibre on peut admettre, que, entre des courts intervalles, le nombre indice de l'utilité économique demeure constant." [4]

The general reluctance to admit the unweighted index-number is probably in large measure due to a prepossession, from which Professor Gini is honourably free, that there can be only one kind of index-number. As M. Lucien March well says: "il semble que la préoccupation de réaliser une indice unique capable de satisfaire toutes les exigences ait souvent obscurci les conclusions.[5] Diverse methods of averaging price-variations are admissible; even as in that sphere where the theory of averages is most perfectly fulfilled, the molecular chaos, several kinds of average are possible and useful. Average *energy* corresponding to temperature and other physical magnitudes is no doubt the most important conception, yet the average *velocity* of molecules is not to be ignored. The average velocity of those corpuscles which, agitated by molecules, exhibit the so-called Brownian movements is not only of great physical importance,[6]

[1] This is well expressed by M. Lucien March in his masterly defence of the unweighted index-number, *loc. cit.*

[2] *Review of Economic Statistics*, August 1921, p. 273. "If the stocks were to be weighted at all they should have been weighted according to their values as indicators of general speculative conditions."

[3] In his *Money and its Relation to Prices*. The argument is considered by the present writer in a review republished in *Collected Papers*, p. 72.

[4] Gini, *loc. cit.*, p. 139.

[5] *Loc. cit.*, p. 64.

[6] The predicted "average velocity" of the Brownian movements provides "visual demonstration of the reality of the heat-motion postulated by the kinetic theory." Jeans, article on "Molecule," *Encyclopædia Britannica*.

but is also of peculiar interest to the economist. For Jevons—after having calculated the average, the unweighted average, of price-movements—published researches on the Brownian movement; [1] the activity of which he had observed to vary with the substance of which the suspended particles were composed. Jevons would not have improved his scientific reputation if he had weighted his observations according to the size of the vessel within which the corpuscles were observed to move hither and thither sporadically.

For further argument in favour of the unweighted mean [2] the reader is referred to M. Lucien March's admirable discussion of the subject.[3] He has fully indicated the claim of the "indice monétaire" to a place alongside of, or at least not much below, the "indice budgétaire." [4]

C.—*The Labour Standard*

A third issue is raised by the proposal to construct an index-number such that the unit of money constantly corresponds not to the same amount of goods but to the same proportion of the goods which constitute the national income, or to the respectively corresponding subjective quantities. Since differences in the *per capita* national income are associated with difference in the efficiency of work, this index-number has obtained the title of the *Labour Standard*.[5] This plan is a stumbling-block to many; yet it is countenanced by some high authorities. There is Marshall's evidence before the Gold and Silver Royal Commission (1887),[6] to the effect that a rise in the "real value" of a precious metal is to be measured by the increase in the power which it has of purchasing labour of all kinds, including that of business men. Again he says: "A person who borrows a peck of green peas in April and returns two pecks in June has paid no interest at all, he has not even returned the corpus of the loan." [7] And again: "An increased purchasing power of the currency in terms of commodities seems to me a good thing if it corresponds to an increasing command over nature which man has obtained

[1] *Literary and Philosophical Society*, Manchester, 1870.

[2] Further objections will be considered in connection with the statistical treatment of the subject. See *Journal of the Statistical Society*, Vol. LXXX. (1925).

[3] *Metron*, Vol. I. (1921). Cp. Edgeworth's *Collected Papers*, Vol. I.

[4] *Loc. cit., et passim.*

[5] Cp. *Collected Papers.*, pp. 196, 293.

[6] Q. 9625; where "diminution" in the first column is an obvious misprint.

[7] Evidence before the Indian Currency Committee [C. 9222], 1899, Q. 11,765.

by improvements in production and transport." The question whether certain changes are beneficial depends on "the question whether the currency retains a constant value in terms of man's efforts."[1] So, with reference to the regulation of wages rather than of currency, Sir Josiah Stamp in an important letter to *The Times* writes: "Assume a community of ten thousand workers, producing a million units of commodities" . . . the worker has a right not to "a money wage adjusted to furnish him with his original standard of living," but to "one ten-thousandth part of the total production, which is a vastly different matter."[2] The conception seems particularly appropriate to the theory of foreign trade; more easily apprehended than Bastable's "unit of productive power,"[3] Pigou's "real ratio of international exchange,"[4] and even Marshall's "bales"[5] embodying a uniform investment of labour and capital."[6]

The discrepancy between the Labour Standard and the better known standards considered under our Section A creates a difficulty for those who propose to regulate the value of money by an official index-number. It is as if a navigator in days of old had been directed by a friendly prophet to steer his course according to the position of the Bear in the heavens, while it was left uncertain whether the guiding constellation was the Great Bear or the Little Bear. Palinurus would understand that a northerly course was prescribed. But he could not be sure in which of two directions divergent, it might happen, by a considerable angle it would be preferable to steer. So the economist is certain that depreciation of the assignat type is to be avoided. But in conditions which seem to have prevailed in the eighties of last century he might hesitate whether with the Bimetallists to aim at restoring the old level of prices, or to acquiesce in the new level as comformable to the Labour Standard.

Some convergence of conflicting directions may be possible on the subjective side. *Primâ facie*, if work and saving become more efficient, the same quantity of felt effort and sacrifice will

[1] Evidence before the Indian Currency Committee [C. 9222], 1899. Q. 11,844.

[2] Published January 18, 1923. See the context of the passage quoted, and the letter published January 23.

[3] *International Trade.*

[4] *Manchester Guardian Supplement*, 1922, Sect. XI.

[5] *Money Credit and Commerce*, p. 157. Cp. evidence before the Indian Currency Committee, Q. 11,792.

[6] The matter is more fully stated in the *Journal of the Royal Statistical Society*, Vol. LXXXVI. (1923), p. 318. See also Edgeworth's *Collected Papers*, Vol. II. pp. 353, 357.

correspond to a greater quantity not only of goods but also of satisfaction. But, as pointed out by Professor E. A. Ross, the total well-being we derive from goods depends not only on the positive satisfaction experienced in consumption, but also on that "social satisfaction" which is largely determined by the relation of our consumption to that of our neighbours.[1] This relation may remain the same while the absolute quantities of goods consumed increases. The circumstances set forth in *Chronicon Preciosum* (above cited) suggest reflection upon the enormous difference between the present conventional necessities of a single man in a good social position and what his counterpart in the fifteenth century required in order to live "decently and cleanly." Yet the satisfaction of feeling that one's appointments are on a par with those of one's equals is not increased by a *general* increase in luxury. *Pro tanto* the regulations of payments according to the Labour Standard would fulfil the inner purpose of the consumption standard, to secure a constant sum of economic welfare.[2]

In conclusion it should be observed that the preceding arguments are not subversive of received doctrines. I plead only for toleration of some additional tenets. It would be too much to ask economists, what Cromwell asked theologians, to think it possible that they might be mistaken. Each maker of index-numbers is free to retain his conviction that his own plan is the very best. I only ask him to think it possible that others may not be entirely mistaken.

F. Y. EDGEWORTH

[1] Cited by the present writer, *Collected Papers*, Vol. I. p. 346. Cp. *ibid.*, p. 210.

[2] It is presumed that the work which has by hypothesis become more efficient has not at the same time become more irksome. If, as some authorities hold, the strain of work, the dis-utility of labour, in modern industry is increasing, the argument becomes *à fortiori*. For the *net* subjective income will *pro tanto* be diminished, the convergence of the Labour and the Consumption Standard will be increased.

THE AGRICULTURAL ARGUMENT

1. The British farmer finds himself again the subject of political debate, and is aware that some new policy is being prepared for his industry. That has been investigated very recently by a Royal Commission, the Selborne Committee, and the Agricultural Tribunal. Some things of a minor nature have been done, and one large measure—the guaranteed price—has been enacted and hurriedly repealed. The Wages Board has been set up, abolished, and set up again. And now the industry has been asked to meet in conference to frame its own proposals. It has not had referred to it the conclusions of the Tribunal; but, when the Conference has finished its *de novo* researches, the farmer may hope that at last an end has been made of inquiry, since Committee, Commission, Tribunal and Conference seem to have run between them the gamut of titles under the guise of which action can be deferred, unless the Conference is followed by a Symposium. Possibly that action, when it comes, will be based on the findings of some of these inquiries; possibly the farmer will find something quite different emerging from the private deliberations of an unofficial party political group. In all this confusion the farmer might at any rate be flattered by the thought that his industry is regarded as one that is peculiarly vital; he believes that it is vital, but can easily find that this adjective has been widely applied to our great industries, and that in 1919 it was coal that was described as "our national key industry, upon which nearly all other industries depend," to such an extent that "the coal-mining industry occupies a unique and exceptional place in our national life, and there is no other industry with which it can be compared." [1] He can find also that, on various grounds, cotton, transport and engineering have been given "key" positions, and can realise as well as anyone that a nation cannot live by coal, cotton, transport or bread alone. He does not believe that he is less efficient than other people, and has the support of the highest experts in this opinion. He understands how price conditions affect the nature

[1] *Coal Industry Commission Report*, Part II., Sect. 42.

and intensity of farming, and the amount of labour he can employ at legal minimum rates. He does not understand how it can be required of him under these conditions to produce "double his present output," or what can possibly be meant by the statement that he can quite well do so "as far as climate is concerned." For, with the opening up of the New World, our climate has ceased to vary with that of our competitors in food supply, so that bad seasons are no longer compensated by high prices. He also hears many things suggested in his interest which he has not asked for, and is not sure that he wants, such as Land Courts. In general he is confused by the excursions and alarums, and aggrieved by the criticisms of his craft.

2. It has been possible for a responsible politician to assert that this is "the worst-farmed country in the world," a statement based on authorities who hastened publicly to disclaim such a meaning. More sweeping in its range was the criticism of a former Prime Minister, that "We have the most fertile soil in Europe. In spite of that, there is not a civilised country in Europe that makes as little use of its land. We bought from abroad, I think, in 1922, 400 million pounds' worth of food-stuffs which, as far as climate and soil are concerned, could have been produced in this country. Compare what has happened in this country with what has happened abroad—in Belgium, Denmark, France, Holland, Germany. The population on the land here is diminishing decade by decade. In other countries it is increasing. The produce of the land here is stationary; abroad, doubled, trebled. Lord Ernle points out that we are producing per acre here a fifth of that produced in Belgium. I think it is about half what is produced in Germany per acre from much poorer soil. That is a piece of criminal waste which is due to a bad system."[1] Some matters of fact involved in this criticism are referred to below. The opinion is implied that we ought to produce all our own food-stuffs, but why not say "as far as prices are concerned"? Surely some reference is necessary to the relation of national policy as a whole to the history of the cultivation of the land. An interesting comment on the position is that *The Times*, having drawn attention in a recent leading article to the international comparisons made by the Tribunal, and never answered, followed shortly after with another article under the title, "Export or starve"; and this, at any rate in the years of peace, is by all the facts the truer view of the chances of privation in Britain.

[1] *The Times*, April 30, 1923.

3. It is only proposed here to make some comments of an economic nature on certain aspects of the present confusion. In the first place, it should be kept in view that the decline of the arable area is not well treated as a problem by emphasising the conventional distinction between crops and grass. Economically, grass is a crop; it is a very cheap one to get, and "letting land go down to grass" represents simply the choice of a cheaper against a dearer crop. Our facilities for growing grass are envied in some foreign countries; and increasing attention is being given by research to the grass crop and its improvement. It is altogether off the point to represent the increase of the grass area as a mark of backward farming. Our statistics come back to this when they include grass in the "cultivated area." In international comparisons we do not get the benefit of our high productivity in grass, because it is not measured. But by agriculturists of certain views our special facilities for grass are described as "the curse of British farming," because it is grown on land which, at the prices of produce, is not good enough for the plough, though it is better than much soil that is ploughed abroad.

4. In two ways the statement that we are seriously underfarmed can be considered—the direct observation of experts, and the use of the returns of yields. As to the former, both Sir Daniel Hall, in his *Pilgrimage of British Farming*, and Sir T. Middleton, in his *Food Production in War*, say the same thing; that farming, like any industry, can be improved, but that it is as well served as any other industry or profession. Let anyone compare with some of the phrases of political discussion the summary chapters of Sir D. Hall's *Pilgrimage of British Farming*, or such local comments as that, in Lincoln and the West Riding flats, "agriculture is a good driving business, which is getting out of the land something approaching the highest yield that is profitable"; that, in Northumbria, "only a determined and skilful race of farmers could attain the prosperity of which we saw so many signs"; that, in the Lothians, "we had not imagined that the management of arable land could reach such perfection"; that "a study of the Shrewsbury district may be recommended to those who declare British farming to be a lost and unprofitable art"; and others to the same effect. Had this been written of the districts of a foreign country it would have been quoted in England in italics. Sir T. Middleton, in asserting plainly that farmers are as efficient as any other people, dismisses as "absurd" the claim that we could produce all our

own food, that is to say, double our output, at any prices possible to consider.

5. Suppose that the idea of productivity is considered in relation to even the crude yields of crops. Taking as 100 the average yield of Europe, exclusive of Russia, our indices before the war were, for wheat, 166; barley, 123; oats, 113; potatoes, 138. These indices would be much higher against the world's averages. But a critical use of the crude yields is necessary, especially in the case of wheat, since the other important European countries grow rye for food, and obtain wheat on a smaller proportion of their cultivated area. If the indices of yield are weighted by the percentages of the cropped area under each of the crops for which there are returns—and these account for from 75 to 80 per cent. of the cropped area—then a composite index of productivity can be obtained, which makes Belgium 164, France 92, while Britain, Germany, Denmark and Holland are all on a par at about 130. The tabular statement and analysis are given in my Report to the Tribunal, and no criticism of the method or result has appeared. The method is that used by the U.S.A. Department of Agriculture in their Year-book for 1919. The European comparison for live-stock is generally similar to that for crops. So that to double our crop productivity is to make it twice that of Denmark, Germany or Holland, about thrice that of France, and 60 per cent. over that of Belgium. Is it seriously meant that we are inefficient until we do this? It is remarkable that the Land Enquiry Committee of 1914, which began the recent attack on our productivity, did not in its section on this subject quote a single yield, crude or otherwise, of any crop in this or any other country.[1]

6. The countries which come out equal have great variations in their methods of tenure, credit, education and organisation, and it appears that much elasticity must be allowed to suit the national conditions, and the way in which things are done by and for farmers of different outlook and traditions. Further, the results do not support the explanation that national average yields are reduced by Protection, through the addition to the acreage of land of low yield. France has some incredibly low district yields, but German average yields are good. It is indeed plain that, while Protection adds to the acreage of poor lands,

[1] With individual variations in output, quoted by this Committee as reflecting on the lower outputs, compare the great variations quoted for Belgium by Mr. Rowntree, a member of the Committee, without any such reflection. (*Land and Labour*, pp. 178–9.)

it also increases the yield of good land, and that no general conclusion can be drawn that it influences the national average yields in one way or the other.

7. During the war, powers were taken whereby the County Agricultural Committees could enter on and cultivate land which was being badly farmed. The total acreage dealt with under these powers in England and Wales was 64,000 out of a cultivated area of 32 millions. No doubt farmers made special efforts during the war, but the ratio would only be 1 per cent. if the badly farmed area were five times as great. Some of it was park and common land.

8. It is sometimes contended that the high productivity of small holdings shows that a generally higher level of cultivation is possible, which ought to be made actual on the larger farms. This argument must be used with care. Instances have been quoted to show the great increase in the value of produce obtained from an area of land after its conversion into small holdings; indeed a carefully weighted tabulation of the results of the agricultural census of 1907 shows a rapid progression of value of produce per acre as the holdings become smaller. The tendency is so decided as to suggest the inference that the smaller a holding is, the better. As only about 15 per cent. of our cultivated land is under small holdings as we define them, and the value of produce averages thirty per cent. more on a 50-acre than on the largest units, does it not follow that there is here a great opportunity for extending the national product by more carefulness of cultivation, which the small holder has applied because it is necessary in his case? This inference is dangerous because the product is taken gross in these comparisons. The small holder who can buy in from the larger farms, directly or indirectly, his feeding stuffs and other requisites will of course show a high gross product per acre, but only by being credited with something which has already been reckoned in the product sold off the larger farms. With a great extension of small holdings, more of their area will be required for their own requisites, and what is sold off will be less to the acre. The conditions under which small holders work while they have 15 per cent. of the area cannot be generalised so as to apply if they held 50 or 80 per cent. of it. Small weaving sheds will show a large value of product in relation to floorspace while they buy in their yarns: but if they must produce their own yarns the final product must decline in value per 100 feet of space occupied. The comparative economy of the small holding must have regard to the fact that

it is less self-contained than the large one which has a similar product. The mistake in regard to product is apt to be repeated in regard to population. The whole agricultural population is not increased if men are drawn from farms and concentrated on special areas, though the population of these areas is increased.

There remains the fact that the small holder works very hard, and that this margin of extra work, paid for by the feeling of independence, has to be reckoned in national product. But it also cannot be taken gross. The very limitation of area compels harder work in order to make a living. If on farms there is one labourer to 40 acres, and the same kind of produce is got on holdings of 20 acres, there must be harder work in the latter case to give the *same* value.

This of course is not an argument against the extension of small holdings; for some crops holdings are normally smaller than for others. It indicates only with what precautions an argument as to national productivity can be based on the quoted output of small holdings. The general results already stated as to comparative productivities are here in point, since in the other countries holdings are smaller than in Britain.

9. The last aspect of the problem of productivity is that raised by the Middleton Report on German agriculture, which showed that food production was 50 per cent. per acre higher in Germany than in Britain, using food in the sense of the caloric content of the crops which were actually produced. The fact that the conclusions of this argument were presented in summary form in its first paragraph led to misconception by those who had read no further, since the subsequent argument was necessary to explain the technical sense of "food" production as here employed. Food production in this sense will be increased by the increase of arable farming, which is a question not of efficiencies, but of prices, and Germany protects arable strongly. The *Socialist Policy for Agriculture* of 1924 quotes the summary, without reference to the technical sense of the words, and considers it an indication of the "less productive utilisation" of our soil. This is a mistake, and the reference to Denmark which follows, as an instance of a more productive country, would have been impossible had notice been taken of the fact that the method of the Middleton Report was lately applied by a Danish expert to a comparison of British and Danish outputs in calories per acre, with the result that there was nothing to choose between them.[1] But in any case a comparison made on

[1] *Journal of the Royal Statistical Society*, January 1921.

the basis of some aspect of the output which the farmer does not take into his reckoning at all cannot give any conclusions as regards relative efficiencies of cultivation; if it is calories that are wanted, arable must be made more profitable, and education, applicable as much to grass as to arable, will not turn the balance. The implications of this whole argument on the calorie content of our product are protectionist as regards arable, and can lead nowhere else.

10. As a question of fact, the statement that only in this country has the agricultural population declined in recent times is merely untrue. It has very seriously declined in the other industrial countries of Europe—Germany, France and Belgium—for the same reasons as here; in Germany, for instance, between 1882 and 1907, the industry as a whole lost over 7 per cent. of men employed, and nearly 29 per cent. of male farm labour. Belgium lost a seventh of men engaged between 1880 and 1910. There is a relative decline all over the world, while in old countries the absolute decline is due to both economic and social causes. The economics of the decline depends on the increased use of labour-saving methods which are being urged on the farmer in the interests of efficiency, and on the fact that in agriculture this works otherwise than in manufacture; other industries can build new factories, and employ more men with than without mechanical improvements, but agricultural land is limited, and displaced labour has to go elsewhere. The social causes are well known and are a matter of concern in many countries. To tell the farmer to employ more labour, at legal minimum wages, is to ask him doubly to increase his labour costs, and is the opposite of the advice he is receiving from within the industry. If it is desirable to employ a large number of people on the land, the economic causes of depletion are unlikely to be met without differential assistance of some kind to arable cultivation, and this has now been given in the case of sugar-beet; or without a great extension of small holdings. The latter method is the more lasting in its effects, since labour-saving devices will always be working so as to reduce the number of men employed on arable cultivation, while in the case of the small-holder their effect will rather be to lighten his intensive labour. It is less easy to say which influence would act more rapidly; this must depend on the cost the country would be willing to incur. The largest number of small-holders settled under our permanent Acts was about 2700 in 1913; if this could be increased to 3500, the addition to the agricultural population in three years would

be about the same as if a quarter of a million acres of arable had been gained. Either of these results will require a national charge of some kind and a considerable effort, the small-holdings policy being probably the less expensive.

11. In what has been said the aim has been only to ask that the argument should be related to facts which are available to anyone. It is difficult to account for the misconceptions which are so common and confident. Our agriculture can, of course, be improved, but it should not be merely talked into a plight which does not nearly represent its condition. Facts favourable to British agriculture have a right to live, but are in danger of neglect in the interest of programmes which prefer strong statements as a basis for strong and striking proposals. The competition of parties is apt to lead to the following wrong order of thinking on agricultural policy: first, we must have such a policy; second, we must find reasons for having it; third, we must find items to constitute it. On the contrary, it should in the first instance be made clear what are the national objects we wish to promote through the development of this industry in particular. Do we simply want a larger population on the land? If so, since the strongest current of rural exodus is towards the Colonies, and not, as is often supposed, towards our own towns, why do we pass an Empire Settlement Facilities Act to subsidise the emigration of agriculturists? For what reason do we want a large population to live under the comparatively isolated conditions of rural life? Is it for the sake of national health, and, if so, have the vital statistics of this country, and the recent history of these statistics, been compared with those of the more agricultural countries of Europe? Do we want more rural exodus towards the towns in order to promote urban health, or less rural exodus in the interests of agricultural settlement? It will be found that this aspect of the argument needs caution, since national health is bettered rather by movement from than to the less healthy areas of large population. Do not in any case let the health argument be made a *stalking-horse* for some other purpose, but the argued case of a national interest. That the argument is not easy will be seen by comparison of Sir William Ashley's memorandum with a section of the Minority Report of the Tribunal. If, on the other hand, it is a question mainly of the distribution of the sources of our food supplies, *why* do we wish to increase home as against other sources? This question presents no difficulty to Protectionists, but Free Traders are becoming involved, as the

sugar subsidy shows. Do we need, six years after the war to end war, a new provision for national defence? It is very important to know if agricultural policy is mainly directed to this purpose. As it is, most of the discussions to which one listens on the whole subject are implicitly Protectionist, and this is the point of view that will continue to gain as long as the crossing arguments are not separated, and some other definite basis is not chosen to stand on. If efficiency is the sole basis, then any special consideration for arable drops out.

12. Economists were asked to give a judgment on all the aspects of the problem when the Tribunal was set up. They strove to separate the issues and to show the nature of the choice that is before the country. But what use is it all, if no Enquiry will be acceptable which does not supply the superlatives that will give *éclat* to a political drive? And especially if policy is to be based on the sheer libel that British farming, with its great history and its great contributions to agricultural method, is to be discussed in the company of such phrases as "the worst," or even "among the worst," in the world?

D. H. MACGREGOR

BUREAUX FOR ECONOMIC AND "BUSINESS" RESEARCH IN AMERICAN UNIVERSITIES

THE bureaux for " business " and economic research, which are multiplying rapidly throughout the larger universities of the United States, deserve comment here for two main reasons: they exhibit most of the influences which are tending to carry the Industrial Revolution (that is, extreme division of labour and quantity production) into all sorts of research on economic materials; and, moreover, they appear to show that, through co-operative arrangements between universities and business associations, not merely the arts of business administration and of pedagogy connected therewith, but also economic science itself, may be advanced in a unique way.

Example from Researches on Expense Norms

One staple type of investigation, common to most of the organs for " business research," will furnish a preliminary illustration of these points. In 1911 the first bureau of business research was organised at Harvard, in connection with the young Graduate School of Business Administration. It began to collect and publish classified data on operating expenses in the retail shoe trade, the data being solicited from merchants whose shops are situated in various towns and cities of several States. Gradually this and other trades have been studied by this bureau for successive years—groceries, drugs, jewellery, hardware, automotive equipment; often both wholesale and retail branches—and the magnitude of these researches may be inferred from the fact that in 1924 some five hundred retail shoe establishments furnished detailed accounts of their year's operations, all calculated on a uniform system, for the bureau's statistical summaries.[1]

A bureau of similar type was set up in connection with the School of Commerce of North-western University (Chicago) about 1918. This organisation, assisted by the National Association of Retail Clothiers, has been assembling and inter-

[1] See Bulletin No. 43, Harvard Bureau of Business Research, *Operating Expenses in Retail Shoe Stores in* 1923 (pp. 62, $1.00).

preting operating-expense data pertaining to 170 (from 1917 onward; 120 since 1916) retail shops whose principal stock is "ready-made" clothes for men, which garments are manufactured in both large and small factories.[1]

In all these instances the bureau first designs a standard accounting system for the trade in question, in order that items from different establishments may be as nearly comparable as possible. The schedules on which correspondents transmit their records, after the latter have been kept a year according to the standard accounting system, call for various items which can be checked against one another in the bureau's offices to give a partial proof of the accuracy of the correspondent's figures. Safeguards are provided, of course, against any use of a co-operator's individual data which might seem injurious to him. The considerable expenditures required for the bureau's part of this work are secured in large measure through the national trade associations, like that of the retail clothiers.

Now, such an enterprise is evidently large-scale investigation; but what is its practical or theoretical significance? The practical purposes are manifold, but two stand out prominently, viz. to improve teaching methods in the school of business administration which maintains the bureau, by assembling new and representative facts about actual business conditions; and to improve the accounting practices of the co-operating firms and to advise each co-operator as to which, among his own classes of expense, are high, low or average, as compared with other members of a considerable sample of his trade. The theoretical ends incidentally served are more inchoate; but there are indications that they are not unimportant. For example, Director Secrist of the North-western bureau has published data collected in the clothiers' study in a form which seems to shed new light on the theory of profits. An outstanding feature of these presentations is the charting of percentage of total operating expenses to total sales, by individual reporting firms, so as to make a "supply curve" similar to those we

[1] See this bureau's bulletins. Series II., on the clothing trade, begins with No. 1, *Costs, Merchandising Practices, Advertising, and Sales in the Retail Distribution of Clothing;* published by Prentice-Hall, Inc., New York, 1921 (pp. 622, $7.50); most of the other eight bulletins hitherto published in this series are on a less ambitious scale (as are those of the Harvard Bureau), and sell at 50 cents to $2.00. Series III. deals with investigations of 143 retail meat shops, begun in 1923, financed by the Institute of American Meat Packers (field services also contributed by U.S. Department of Agriculture, Bureau of Agricultural Economics). See especially No. 9 of this series, *Expenses, Profits, and Losses in Retail Meat Stores; How Much and Why;* Chicago, 1924 ($1.00).

commonly associate in theory with the extractive industries, but which had already been shown by governmental investigations to be characteristic of a number of manufacturing industries. The proper theoretical interpretation of Professor Secrist's exhibits is an open question, of course, but that such crude approximations to quantitative evidence on the profits situation in a given line of business are at least worth the attention of theorists is not to be doubted.[1]

Many features of these business research bureaux, on the other hand, put the economist on his guard. First, they are auxiliaries of the schools of business administration ("colleges of money-changing," as some of our philosophers inevitably call them), and the offspring like the parents have sprouted in mushroom fashion. Second and more important, they are usually supported in considerable part by active business associations, not merely as to the funds necessary to buy tabulating machines and human machines to run them, but also as to the raw data which the bureaux work up. These stigmata lead some bystanders to call the movement a travesty on research.[2]

Another innuendo, that might easily be developed, would trace the German influences leading to the scramble among all our scholars for publication of "original researches," beginning with the Ph.D. Thesis.

The economist may protest, therefore, if we must be "organised" in order to provide us with the expensive machinery which present-day inductive studies demand, let it be through bureaux for *economic*, not *business*, research; for research *about* business, rather than research *for* business. Several universities have, in fact, secured bureaux which purport to be of this

[1] The North-western bulletins referred to are Series II., No. 8, *Competition in the Retail Distribution of Clothing; a Study of Expense or "Supply" Curves* (1923, $1.00), and No. 9, *Expense Levels in Retailing; a Study of the "Representative Firm" and of "Bulk Line" Costs in the Distribution of Clothing* (1924, $2.00). See discussion of them by Professor F. W. Taussig ("A Contribution to the Study of Cost Curves," 38, *Quarterly Journal of Economics*, pp. 173-176, (November 1923), and by Professor A. B. Wolfe ("Competitive Costs and the Rent of Business Ability") 39, *Ibid.*, pp. 39-69, November 1924). These economists differ on their interpretation of Professor Secrist's data, but they agree that "business research" of this character "is a good omen both for economics and for business,"—as Professor Taussig puts it.

[2] Some idealists, to be sure—like our literary arbiter H. L. Mencken—say that all our other types of research arrangements are just as bad as those for business research. "What ails every one of these undertakings for the fostering of science is that, whatever its pretensions on the label, it is utilitarian in the bottle—that its primary aim is to back the scientist into a comfortable stall and milk him like a cow." (Review of "Arrowsmith," *American Mercury* for April, 1925).

disinterested type; the Harvard Committee on Economic Research is doubtless the best known, by reason of its publications on various aspects of the trade cycle. This organisation is loosely connected with the Department of Economics, and administratively is entirely distinct from the business school and its bureau of business research. We cannot quite discuss these two types of bureau in the same breath, then; yet we shall find that the differences between them (from the standpoint of economic science) are less important than superficially appear, and that the interests of both universities and the business community in economics, political economy, and discovery and teaching of efficient arts of business administration are so intertwined that all may be advanced by a common sort of co-operative research, provided that proper care is taken to prevent any one practical tail from wagging the dog of scientific inquiry.

General Characteristics of the Institutional Research Movement

As a step towards understanding and appraising these agencies, let us cast a brief glance at some other wings of the institutional research movement, of which the former are a part. Large-scale methods came into other scientific fields, of course, before they reached economics. In mechanical and chemical technology, for example, the leading manufacturers have maintained experimental laboratories for a generation; and in some of these (*e.g.* the General Electric and American Telephone) contributions of some moment have been made to the pure physical sciences. About twenty years ago co-operation began to develop between university engineering schools and associations or firms, first through "industrial fellowships" in the universities (supported by industrialists), and more recently through co-operatively supported units which include special facilities as well as the research fellows. The Mellon Institute of Industrial Research of the University of Pittsburgh, established on a permanent basis by endowment in 1913, which now maintains eighty fellows with the co-operation of several hundred manufacturers, at a cost of some $350,000 a year, is doubtless the most conspicuous in output of publications as well as resources. Most of the larger engineering schools now have some such arrangements; and even the United States Bureau of Standards, which maintains an exceptionally competent corps of physicists and engineers, co-operates with a number of industries for advancing technology as well as for purposes of further standardisation.[1] In these

[1] See Report of the Secretary of Commerce for 1923, pp. 152–171.

cases the practical benefits to industry and the community from the application of science to the arts is the side generally mentioned; and indeed the expenses are usually so largely borne by active firms that pure science is bound to be kept in the background so far as the paymasters know what is happening. Nevertheless the university-partner should always be able to see that such projects are made to advance science as well as to apply it (provided they can secure sufficient funds without practical strings tied to them) to a much larger extent than private research departments, both because such is a prime purpose of a university and because it usually has a greater continuity of existence than has a research organ maintained by private initiative.[1]

Several other analogues could be named, such as the foundations for medical and allied researches, or, on a still larger scale, the huge grants of federal and provincial governments, during the past fifty years, in aid of agricultural experimentation in the State "land-grant colleges" of agriculture.[2] At the present moment our national administration has just made a new appropriation of some hundreds of thousands of dollars for developing research in *agricultural economics* in these State agricultural experiment stations—thus reflecting the lag of economics behind natural sciences in popular estimation.

Another important part of our background of institutional research is the other types of agencies dealing with economic subject-matter. In personnel, equipment and subjects considered, our university bureaux show numerous likenesses to half a dozen brothers or cousins, which are supported in divers ways. My readers have doubtless noticed that the functions which I have mentioned as being carried on by the university organs are also exercised by a growing number of governmental bureaux, such as those within our State departments of labour and industries, and in our federal departments of Commerce, Labour, and Agriculture, for example, or in the Federal Reserve system and Federal Trade Commission. The attribute of compulsory powers, of course, is peculiar to the latter cases, yet the govern-

[1] That the contributions to physical science already made by these engineering research organisations are not negligible, is the judgment of a colleague in the physics department. For example, in our own engineering research department (University of Michigan), which is only a few years old, the work of physicists on a practical problem of ball-bearing noise has led to the invention of a device for objectively measuring "noise" which will doubtless have value for many sorts of experimental work on sound.

[2] Established and, to some extent, endowed, out of proceeds of the public domain of the United States.

mental agencies also are depending a great deal on the voluntary co-operation of business men, and at the same time they are fast adding research and interpretative functions to their older activities of collecting and publishing "statistics." Further, if the story were not so familiar, we could easily sketch the parallel research departments, which use more or less economic methods, of trade associations, large individual firms, trade union groups, and philanthropic foundations. (Naturally, some part of this so-called research is really propaganda, from our point of view; but objective standards for separating scientific truth from propaganda, among important propositions on economic affairs, are at present well-nigh inconceivable.)

Finally may be ear-marked a trend of some significance within this whole field of institutional research; that towards integration of several basic sciences for attack on a family of problems which forms a convenient unit. The rise of economic study in connection with the technical agricultural experiment stations illustrates this tendency, as does the recent co-operation at the University of Pennsylvania between the medical school and industrial research department in the study of labour problems. Consequently several institutes for research in government, population, food, and so on are being set up with the explicit purpose of co-ordinating work in several techniques toward the common end.[1]

What Existing Bureaux are Doing; and Why

From this glimpse of the larger forces which have produced them we must return to our university organs for business and economic research, and inquire in more detail what they are doing, and how they get the money to do it. Then we can raise with more confidence the question of what their work is worth. There is not space to consider a number of miscellaneous projects which have been undertaken, such as the studies of local taxation made at the University of Illinois (Urbana), the local applications of established methods of studying the trade cycle which are now going forward at Brown University (Providence, R.I.), or a variety of special investigations made at New York University; we must concentrate attention on a few leading types.

[1] The National Research Council (a philanthropically supported organisation which was organised and rather closely associated with the Government's work during the war) has been promoting institutional research among the natural sciences, both as to securing funds and as to co-ordination, since about 1918. The Social Science Research Council came into existence about 1923 to perform similar services for social science investigations.

1. The search for *operating expense norms* by trades, as noted above, has occupied the business-school bureaux more than any other subject.[1] These investigations have also yielded some by-products in addition to statistical summaries; for several bulletins on "management problems in the —— industry," on methods of paying salesmen, trucking costs, have also grown out of them. In most cases, I believe, the trade associations concerned have met the larger part of the direct expenses attributable to these investigations—some small part of which is recouped by the sale of the resulting bulletins. The whole cost of the first studies of this kind, however, were borne by Harvard University, because the primary object was to secure teaching materials.[2]

2. *Quantitative norms of labour management*, and of still other phases of business, have also received attention. The Department of Industrial Research at the University of Pennsylvania (Philadelphia), for instance, has specialised on the study of labour relations, and its publications deal chiefly with original data obtained from co-operating firms on "labour turnover" and absenteeism.[3] The bureaux of Harvard and North-western have published bulletins on labour terminology and labour relations in the Chicago printing industry respectively.

The co-operative researches in personnel administration which were carried on for about nine years at Carnegie Institute of Technology (Pittsburgh) must be mentioned in this connection, though the Institute's contribution was through its division of applied psychology rather than via an economics or business department. Several associations of business firms, particularly some large establishments in the life insurance, tobacco, mercantile, and electrical manufacturing lines, supplied funds and

[1] Besides the investigations mentioned, of the Harvard and North-western Bureaux, see reports of the bureaux at the University of Nebraska (Lincoln), and at New York University.

[2] On this point and numerous others relating to the bureaux, see discussions printed in the proceedings of the 35th Annual Meeting of the American Economic Association, December 1922 (13 *Am. Econ. Rev.*, Supplement, pp. 223–236); also abstracts from 6th Annual Meeting of the American Association of Collegiate Schools of Business, May 1924 (Ronald Press Forum, New York, May 1924). In general, each bulletin published by a bureau contains a list of titles of previous bulletins. The Domestic Commerce Division of the U.S. Department of Commerce, Washington, is understood to be preparing a bibliography on business research.

[3] "A Study in Labor Mobility," 103, *Annals of American Academy of Political and Social Science*, pp. 163–234, 1922); "Attendance in Four Textile Mills in Philadelphia," *Ibid.*, Vol. 104, pp. 191—221 (1922). Members of this department were secured by the U.S. Coal Commission during 1923–24 to prosecute a number of its investigations.

made their employees available for experimentation in researches on psychological and other tests for selection of employees, and also for the development of improved methods of training. Because of the number of scientifically competent people engaged in this project, and the unusually large number of subjects made available under actual production conditions in several industries, the work was of special interest to students of labour economics and vocational guidance.[1] A somewhat similar co-operative arrangement is reported to have been started between the Johns Hopkins University (Baltimore) and the local employing printers' association.

Two of these cases are unusual, in that philanthropic funds were secured in support of researches. The Department of Industrial Research at the University of Pennsylvania has been generously subsidised by the Carnegie Corporation (organised for continuing and extending Mr. Carnegie's philanthropies), as well as by the co-operating firms; and psychological researches at Carnegie Institute, under the same persons who directed the co-operative project above described, were aided by a recent grant through the National Research Council. Few or none of the other bureaux for business research have secured financial help of this type—possibly because their work necessarily is more nearly utilitarian and profit-making than are other types of research which are usually endowed, or perhaps only because the latter were recognised earlier. As we shall notice presently, however, several organisations for institutional *economic* research are supported more largely from philanthropic sources, and less from the industries whose affairs are being studied.

3. *Collecting materials for teaching business administration* is considered an important activity of the bureaux. The collection and publication of concrete descriptions of actual business problem-situations, for class-room use, has come to be one of the principal occupations of the Harvard business school's bureau, as that school has gone in enthusiastically for teaching by the "case method" analogous to the method now commonly employed in American law schools. The professor in charge of a given subject (say marketing) furnishes to the bureau an outline

[1] Reports of these investigations are to be found in various trade and business journals; but see especially the files of the *Journal of Applied Psychology*, the *Journal of Personnel Research*, and a general summary of the situation as its parts were being transferred to other places by W. V. Bingham, "Co-operative Business Research," 110, *Annals of American Academy*, etc., pp. 179–189 (November 1923).

of the points he wishes illustrated, whereupon salaried agents (perhaps including the professor and his assistants) go out into the marts of trade and industry to procure realistic descriptions of appropriate actual situations, by interviewing considerable numbers of business executives. (Identity of the firms thus furnishing information, many of whom doubtless co-operate with the bureau in other activities, is usually concealed.) These Harvard text-books are used in a number of other schools, so that revenue from sales doubtless is appreciable—an outcome, however, which is hardly to be expected in the future, when each bureau more largely supplies its own school's classes.[1]

4. The output of these bureaux connected with schools of business administration may gradually be compared, from the scientific point of view, not merely with the work of independent scholars and organisations outside the universities, but with the products of the other type of university bureau to which reference has already been made—the bureau for *economic* research, which is avowedly orientated more with reference to political economy and less with respect to the development of business technique. Our experience with this type is so limited that I venture no inferences as to what it will do, in comparison with the business research type. The Harvard Committee on Economic Research, indeed, appears to be strikingly successful in advancing the fundamental science of the business cycle, as well as in selling its periodic service to the business community. (What is done with the commodity after it is bought is possibly another matter.) The Committee's activities, moreover, appear to exhibit two satisfactory potentialities of bureaucratic research, namely, continuous accumulation and analysis of data on a given problem, and the branching of a limited field of study into subsidiary inquiries which gradually make co-operation with specialists in many other divisions of economics mutually advantageous.

[1] See "Business Teaching by the Case System," by Wallace B. Donham (Dean of the Harvard business school), 12, *Am. Econ. Rev.*, pp. 53–65 (March 1922); and cf. remarks by Melvin T. Copeland (Professor of Marketing and Director of the Harvard bureau), in the proceedings of the 6th Annual Meeting of the American Association of Collegiate Schools of Business above referred to. The series of case-books prepared by the Harvard bureau, which includes problems in marketing, retail merchandising, export trade, accounting, and other fields, is published by A. W. Shaw Company, Chicago. The University of Chicago's School of Commerce and Administration publishes a list of "Materials for the Study of Business," which includes some "cases" in the sense used above. An earlier appraisal of the bureau movement, by Director Secrist ("Research in Collegiate Schools of Business") appears in 28, *Journal of Political Economy*, pp. 353–374 (May 1920).

Whether results as beneficial as these, scientifically or politically, may be obtained *cæteris paribus* by the business-school bureaux it is impossible to say; but it is at least worthy of remark that all of these economic bureaux which have come to my attention are actually receiving some support from business houses and associations—which fact may mean that the economic-research organs are unworthy of their name, or it may mean rather that the difference between the methods which must be employed for effective business and economic research is less abysmal than we should casually suppose. With the Harvard Committee, this business support takes the form of annual subscriptions to its publications. These subscriptions are said to be sufficiently numerous now to supply all expenses, though the Committee's work in the beginning was underwritten, I believe, by philanthropically-inclined capitalists. The University of Wisconsin's Institute for Research in Land Economics and Public Utilities (established 1920) is financed chiefly by gifts, but the National Association of Real Estate Boards is assisting in an advisory capacity; and some special investigations have been paid for by it and other business associations. The Food Research Institute at Stanford University (founded 1921) was made possible by generous grants from the Carnegie Corporation for a ten-year period, and thus enjoys an "independent income"; yet this bureau also seeks and receives data and advice from certain trades—notably the commercial bakers. We shall have to inquire, presently, whether entangling alliances of these sorts are likely to corrupt the scientific ideals of the organisations involved.

Interpretations: Practical Uses—Private and Public

With this sketch of sources and activities in mind, let us return to the issues of appraisal which were raised at the beginning of the discussion. What I have to say will apply chiefly to the better-established *business*-research bureaux, but occasionally we can make further specific comparisons between them and the economic-research wing. It is usual and convenient to consider separately the services which the business school bureaux may render to four main interests (which correspond, in many cases, simply to different groupings or activities of the same persons), namely, the business community, the university's teaching of business administration and economics, public control of business through ethics and law, and the advancement of economic science.

Fairly adequate discussions of the benefits, which in some

degree are expected to accrue to the first three of these interests, are to be found in the literature referred to above (written largely, to be sure, by persons administratively connected with the movement), and so I shall not linger over them. The bureaux have added substantially to evidence brought out by the Federal Trade Commission, the Federated American Engineering Societies, and others, to the effect that the larger number of our business men keep only the crudest of records, and that natural selection is a slow and costly process for sifting out inefficient practices in respect to any one process in a given trade. Quite evidently these research agencies in the schools of business have done their bit toward improving this state of things in the industries they have studied. One important service to business, which they are peculiarly fitted to render, is the training of a supply of young persons who are skilled in the application of scientific research methods to actual business problems—in effect they shorten the apprenticeship which an economist would have to undergo before he could bring his science to bear on the concrete puzzles of an entrepreneur. Some of these researchers are finding their way rather easily into general executive posts. In other respects, also, the university connection has some solid advantages for the business world, as compared with trade associations and commercial agencies which offer similar services. The part-time work of professors is in some cases especially valuable; and the university bureau promises unusual stability and protection against improper uses of confidential data.

But have our bureaux been actually worth their keep to business supporters up to the present? Disregarding whatever advertising and propagandist benefits may be found, I am a little doubtful. If you study their bulletins, and ask yourself how men in the trade could use the information for profit, or if you talk to the co-operating entrepreneurs privately, you may easily conclude that the movement is still experimental—even though it is true that business houses are paying enormous sums to their trade associations, accounting firms, "management and efficiency" experts, and so on, for goods which differ from those supplied by the university bureaux chiefly as to the colours with which they are painted by their salesmen. But remember that the field has not been tilled long. Many of us believe that it bears so many resemblances to the domain of mechanical technology that "business research," like technological study in its early days, has large potentialities—first for private profit-

making; and eventually for cheapening production throughout industry.

With respect to the bureaux' reactions on teaching, also, a word may be added here to what was said above. Some university administrators see in the business-bureau scheme a means for meeting more effectively the competition of the business world for high-grade accountants and other specialists who are needed for the business or economics faculties. One insidious form of this competition, which showed itself earlier in connection with the law, engineering and medical faculties is the private practice of professors, which adds to their income and gives them practical experience that often reacts favourably on their teaching —but which is difficult to regulate so that it neither engrosses too much of their energy nor stultifies their teaching. By means of a bureau, perhaps, higher salaries may be paid when necessary, more of the professors can be given opportunities for practical contacts, and the character and amount of such work done by the individual instructor can be more adequately regulated by the university administration.

And the interest of public control of industry has been served, at least in some degree. In a recent Congressional investigation of the old question, why does the farmer get so little for his produce, while the consumer pays so much? the Harvard bureau's figures for operating expenses of certain middlemen were utilised. At this point also we may develop the argument suggested a moment ago—that research in business administration, like inventive research in technology, has possibilities for cheapening production generally—by noting the implication that these possibilities may perhaps justify public subsidisation of business research, as well as economic research.

Yet again certain shortcomings of the existing movement should be recognised. Everyone will agree that more light on actual business practices is a vital step towards better social adjustments; but some will not be convinced by the Congressional investigation I have just mentioned that our bureaux are really shedding much light of this desirable character. Their luminosity, it might be charged, is somewhat like that of the red herring. Several trade associations have been attacked by the Government for exchanging data on costs and other matters in such a way as to suggest restraint of trade.[1] I have never heard any such

[1] A good discussion is by Professor T. H. Sanders, of the Harvard business school: "The Present Status of Uniform Cost Accounting": *Harvard Business Review*, pp. 167–174 (January 1923).

criticism against the activities of the business-school bureaux; but certain of their bulletins seem to reflect a bit uncritically the common complaint of their co-operating firms: "There are too many of us; we are ruining each other." And I have looked in vain, in several of these reports on operating expenses and profits, by trades, for calculations of net profits in relation to invested capital. These qualifications suggest that the university's good name should be safeguarded by ample provisions for criticism of its bureau's activities (possibly by resident economists), as well as by securing the largest possible measure of financial support with no strings attached to it. Such reservations do not necessarily imply, however, that no public services of consequence are to be expected from such bureaux, just because they are voluntarily assisted by business. Very likely much of the information necessary to public control of industry must be obtained by the threat of the policeman; and some, perhaps, through the unworldly researcher disguised as a bell-boy or rent-collector; but surely the business-research movement's possibilities along this line must be awaited and studied before they are despised.

Interpretations: Reactions on Economic Science

So much for the practical purposes served—public as well as private: what now remains to be said of the scientific aspects? Beside the suspicions raised above on this head, based on our bureaux' connections with business training and the treasuries of going concerns, the further criticisms are heard that a research bureau is usually a one-man affair—investigating problems that are of interest to its director, but doing little in other fields of study; and that a good scientist is necessarily a law unto himself; the less he is "organised," the better. These presumptions, however, are considerably offset by other considerations; and the upshot seems to be that—with sufficiently careful planning, and sufficient good-will between the "business" and economics staffs of the university—researches in business administration technique, and in pure, as well as political, economics, can all be made to assist each other by organisation which enlists the interests of various groups of active business enterprises—*provided the bureau is not too largely financed by the latter.* These three types of research have much in common when genuinely scientific methods are employed in them; but of course a study conducted primarily in the interest of improving business technique (in the matter of trade discounts, let us say) is nearly certain to

yield a comparatively small by-product of direct service to students of economics or public economy. The reverse is true too; one reason why business-research has been brought into a separate existence is that the by-products from economic studies which could be used by entrepreneurs are relatively small.

The centrifugal forces just referred to, which tend to split apart economic and business research, are so strong and so obvious that I need not labour the points that, if research of all types is to be kept on a high scientific plane, the majority of the costs should be met from state and philanthropic funds; also that such funds should be used to further the work of able individuals, working each in his own way if he prefers not to be "organised." The centripetal forces, on the other hand, which promote somewhat integrated organisation for all three types (economic science, applications to private economy or business administration, and applications to political economy), need closer scrutiny.

The unifying factor of most importance is their common need of contacts with the industrial and commercial world, for securing the data which only business managers can supply. Of these data, not less essential than statistical items are the continuing acquaintanceships which are promoted by the nature of the relations between the research bureau and its co-operators. Dr. Marshall, as we know, valued highly his opportunities for somewhat similar contacts. It is true that all good libraries supply any student with a rapidly mounting mass of printed data, and it is further true that most business concerns nowadays will go somewhat out of their way to supply information to any reasonably tactful investigator. But a bureau, apparently, can give students connected with its institution an unusually favourable *entrée* into the establishments of its co-operators (the circle of which is constantly extending), even when the purposes of such students are of no practical interest to the employers. For example, when I was teaching at the University of Pennsylvania in the summer of 1922, I found that institution's Department of Industrial Research able and willing to give me introductions to its co-operating firms, so that mutual confidence could be established more quickly than is the case when a student must make his own approach. This *a priori* argument is also strengthened by the circumstances above noted, that our three leading university institutions for *economic* research, as well as our Government analogues, have all obtained some sort of voluntary co-operation with active firms or associations.

Not only do such contacts afford the local investigator favourable opportunities for observing the conditions under which data such as appear in print are collected, they are already to some extent furnishing him *laboratories*, within which he can control his conditions so as to produce types of data which are not in print. Virtually all these bureaux control their data in the sense of having a hand in prescribing the method of recording and in permitting the investigators to ascertain at first hand how well the prescription is followed (a check which most of us cannot apply to governmental or other statistics). At least a few instances could doubtless be found, like that of the Carnegie personnel research bureau, in which employers varied their operating practice experimentally at the suggestion of the bureau students. The British Government's Industrial Fatigue Research Board, as well as the National Institute of Industrial Psychology (Great Britain)—whose organisation and support are apparently analogous to our business-research bureaux—have found employers willing thus to co-operate. Numerous experiments of interest to economists have been made in active firms by individual students, of course. Frederick W. Taylor's career in "scientific management" illustrates this possibility; but it also illustrates the difficulties of such individual inquiries, as compared with an organisation which is subsidised for research, like the Fatigue Research Board. (The latter type, to be sure, finds plenty of difficulties left, in the conservatism of masters and men.)

The objection that these possibilities are largely negatived by the monopolistic tendencies of the director-entrepreneur, who is a necessary part of a bureau, is apparently not insuperable. Care must be exercised on this head in framing the organisation and in selecting the manager, of course; but the objection springs in some measure from the faculty-members' conservatism. If the director is reasonably co-operative and scientific in spirit, almost any member of the local instructional staff who has some initiative and ingenuity will presently hit upon a problem which is theoretically important to him, and yet which has practical aspects sufficient to enlist the aid of the bureau. The bureau's existence may, indeed, stimulate the resident scholars to greater productivity than they would manage when working by independent methods. Velocity of money circulation, effects of various taxes, elasticity of demand for particular commodities, effects of various wage-incentives, are but a few of the topics which can be made to play such dual

rôles. Sometimes, as we have said, the significance will be chiefly for business technique; such are many of the studies of the Harvard Bureau of Business Research. In other cases the investigation will be more largely of theoretical interest, as in some work of the Harvard Committee on Economic Research. These organisations started as something approaching one-man affairs, and both have widened their scope until a number of members of the business and economic faculties respectively have participated. It is possible that organisations so distinct as these two are desirable in any large university; but it would seem that effort would be economised—in securing co-operators among the business community, especially—if somewhat closer relations obtained between the two sides.

In a nutshell I should sum up the existing situation as follows :—Present-day inductive research on economic data, for any of the three main purposes distinguished, becomes increasingly expensive, in terms of each competent investigator. It requires also voluntary co-operation from active firms, who have unique opportunities to supply live data under conditions somewhat controlled by the special student—which condition is more favourable to the student's work than if he must depend chiefly on material collected once for all by a few central collecting and " broad-casting " agencies. Research bureaux maintained co-operatively by university faculties of business administration and economics, and by groups of business firms, are a device for supplying *both* the above needs (money and data), and examination of their output indicates that it may become decidedly valuable for theoretical as well as practical purposes, provided that these purposes are not confused, and that financial support appropriate for the one is not expected too largely to maintain the other also.

Bibliographical Note

Pending the publication of a comprehensive bibliography (by the U.S. Department of Commerce or by some member or federation among the bureaux themselves), the student may secure from each bureau an up-to-date list of its own publications. When bulletins are published at irregular intervals, each bulletin usually contains a list of the previous titles and prices. " The Bureau of Business Research " is a sufficient address, if not the exact title, at the following institutions: Harvard University, Cambridge, Mass.; North-Western University, Chicago, Ill.;

New York University, New York City; University of Nebraska, Lincoln, Nebr.; University of Illinois, Urbana, Ill.; Brown University, Providence, R.I.; Ohio State University, Columbus, O. Similar to these in its relation to the business administration school is the Department of Industrial Research, Wharton School of Commerce and Finance, University of Pennsylvania, Philadelphia, Pa. The other organisations doing economic research, referred to above, which are not administratively connected with business administration departments, are the Committee on Economic Research, Harvard University; Institute of Land Economics and Public Utilities, University of Wisconsin, Madison, Wis.; and the Food Research Institute, Stanford University, Calif. These three institutions last-mentioned all publish periodicals—the Harvard Economic Service (affiliated with the London and Cambridge and French Economic Services, and supplemented by the quarterly Review of Economic Statistics), the Journal of Land Economics and Public Utilities (quarterly), and Wheat Studies (ten times a year), respectively. The Brown Bureau publishes its Brown Economic Service monthly.

Although the foregoing are the most conspicuous examples of their type, nevertheless an investigator who should circularise all our leading colleges and universities would discover several other similar bureaux; besides a number of somewhat analogous services. Several university extension departments, for example, as at Indiana University (Bloomington, Ind.), have published bulletins on business technique; and the economics or business administration staff at Yale University (New Haven, Conn.) has some connection with the co-operative research arrangement recently formed between the engineering school at that university and the Connecticut manufacturers' association.

Comparisons of the movement sketched above with developments toward institutional research in other fields are exceedingly instructive, and might well receive special attention from such bodies as our new Social Research Council (of which Professor C. E. Merriam of the political science department, University of Chicago, is chairman). Special mention should also be made of several new institutions for economic and for business research which are not outgrowths of universities. Such are the National Bureau of Economic Research (New York), which is responsible for several volumes on income in the United States and on certain aspects of the trade cycle; the Institute of Economics (Washington, D.C.), whose large staff has produced such studies as

Germany's Capacity to Pay; and the National Industrial Conference Board (New York), which is supported entirely by associations of manufacturers and has published in the past six years a considerable number of research reports on taxation, labour relations, and several other subjects.

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A CONTRIBUTION TO THE STUDY OF LONDON'S RETAIL MEAT TRADE

Introduction

THE total quantity of meat and allied produce distributed from the London Central Markets in 1924 was 480,520 tons, which may be accepted as being approximately London's consumption of raw meat commodities at the present time. By London I mean Greater London, comprising the Administrative County and outer fringe of urban districts, which according to the census of 1921 contained 7,480,201 persons, a figure which at the present time has probably risen to close upon 8,000,000.

Of the 480,520 tons mentioned, 265,308 tons consisted of beef and veal, of which 82·9 per cent. was imported mainly from the Argentine; 133,684 tons consisted of mutton and lamb, of which 82·5 per cent. was imported, mainly from New Zealand and Australia; 50,280 tons consisted of pork, of which 63·3 per cent. was imported, mainly from the Netherlands; 18,383 tons of poultry and game, of which 31 per cent. was imported, and 12,865 tons of butter, eggs and rabbits, of which 61·2 per cent. was imported.

The total quantity of butcher's meat—beef, mutton and pork—amounted to 449,272 tons out of the whole 480,520 tons of raw meat commodities. Assuming the above population of 8,000,000, this gives a weekly consumption *per capita* of 2·41 lbs. of butcher's meat.[1]

These figures show the great magnitude of the London meat trade and the principal sources of supply. But what I shall be most concerned with in this paper is economic elucidation and relationships, and therefore I propose to commence with a general abstract consideration of the laws of supply and demand, leading up to special aspects of the retail trade in particular, which I have investigated.

Supply and Demand

It will be evident that there are four principal interests involved in the London meat trade: the producers of meat, the importers, the retailers, and the consuming public.

[1] The annual consumption of beef and mutton (including veal and lamb) per head of population during the seven years ended 1920-21 was (*a*) in the United Kingdom 84·05 lbs., (*b*) in the U.S.A. 85·85, (*c*) in Australia 179·15 lbs.

To the Londoner meat is a physical necessity, and, as I shall show later, the demand—the effective trade demand—is relatively constant, except for certain well-defined seasonal variations or very abnormal alterations in prices or in purchasing power. The demand is also relatively inelastic, which means that a slight fall in price does not induce a considerable increase in the total amount of meat purchased, while a slight rise in price does not induce a considerable decrease. In respect of different *kinds* of meat, however, the demand is less inelastic; that is to say, if the price of mutton falls relatively to the prices of other kinds of butcher's meat, more mutton (after allowing for monotony or the desire for variety) and less of the other kinds will be purchased. But the total amount of meat bought will be approximately the same. This idea of "substitutes" is fundamental in regard to elasticity of demand. It is because there is nothing that can satisfactorily take the place of butcher's meat as a whole which tends to render the demand for it relatively inelastic. It is, of course, true that poultry, game, butter, eggs, rabbits and fish are alternatives, but amongst the working and lower middle classes, who are the great consumers of meat, the first four are too expensive. Rabbits and fish, to some extent, undoubtedly tend to render the demand for butcher's meat elastic, but not to such an extent as to detract seriously from the truth of the general assertion that the demand is fundamentally inelastic.

Similar characteristics prevail in regard to the production of meat. The supply is relatively constant week by week. There is not, in the production of meat, the same degree of variation such as one finds in the case of crops like wheat and cotton. The supply of meat is also relatively inelastic. A slight rise or fall in the price of beef or mutton does not induce a considerable response in regard to the increased or decreased breeding of animals, even if this rise or fall be lasting. Any temporary or periodic change of price level has practically no effect on production. The reason for this is very evident when one considers the nature of the stock-raising business, particularly the fact that it takes two years to rear a beef animal. Finally, as in the case of the consumer, there are no alternatives open to the producer of meat—especially the big Australian sheep-farmer and the Argentine cattle-rancher. Agricultural and economic conditions are generally such that the producer cannot even gradually substitute some other line of production if he finds his business unsatisfactory; he cannot, under most circumstances, even raise sheep instead of cattle; his only alternative, apart from

reduction of costs (which has a marginal limit), is to go out of business at a heavy loss.[1]

Thus I think it will be evident that we have in the meat trade, a trade in which inelasticity characterises both production and consumption, and this means that the middlemen—the importers and the retailers—have very great economic power. Theoretically as a class they can impose upon both producer and consumer to the marginal limit that precedes the point when one is forced out of business and the other is forced into a condition of semi-starvation.

In practice, however, although this tendency does operate, it does not proceed to anything like such serious limits on account of competition, and also, one trusts, on account of ethical considerations.

Competition

As has been intimated, the Central Markets, at Smithfield, is the centre of the London wholesale trade, and although there appears to be a strong nuclear monopoly in connection with the three great importing firms—shown, for instance, by the official figures of stall holdings—and although supplies are certainly manipulated, yet there still appears to be a considerable amount of free play of supply and demand. But quite apart from this, the supply, and therefore the price of meat in London, is not determined merely by conditions in London, but by the competition of other consuming markets of the world's surplus meat, for example, the Continent. Again, temporary restriction of supplies by exporters abroad may also be a factor influencing prices—a measure that has come into vogue in recent years in connection with several overseas food-stuffs and raw materials, but a measure the soundness of which is doubtful.

In regard to the retailing of meat in London, observation and inquiry lead me to the conclusion that competition of a very vigorous nature exists, in spite of the development of "chain" shops and "chain" shop amalgamations. Furthermore, the bulk of the retailers are entirely disconnected financially with the importers, the only exception being that of the Vestey interest.

Constancy of Demand

I have stated that the demand for meat is constant except for certain well-defined seasonal variations or very abnormal

[1] Hides and wool certainly strengthen the position of the producer; but whether they are main products or by-products, meat is still produced, and must be disposed of if possible.

changes in prices or in purchasing power. By demand I mean the trade, or aggregate effective demand, and when I say constant I mean week by week during the year. During the last six months, for instance, the maximum weekly variation in the weekly supplies of beef has not been more than 4·5 per cent. of the weekly average (11,200,000 lbs.). This feature of relative constancy is interestingly demonstrated by Curve 1 in Fig. I, which shows the variation in the total weight of meat sold at sixty shops continuously operating in the poorer districts of London from the week ending July 5 to the week ending December 27, 1924. In spite of the rise in average selling price from 8*d*. per lb. to 10*d*. per lb. (Curve 2), a rise, it may be mentioned of very considerable importance to poor people, there was only a very slight falling off in the quantities purchased. But obviously, since the price per lb. rose much more than the quantities sold fell off, the money paid by the consumers increased (Curve 3). Careful comparison will show that there is a distinct indication of positive correlation between Curves 2 and 3, which, under the circumstances, is only to be expected. It may be added that cash register records indicated that during the period these curves refer to there was only a very slight increase in the total number of customers, so that the rise in sales (Curve 3) was not to any extent due to an increased number of purchasers buying smaller quantities. In regard to Curve 1, it might be fairly argued that this might have risen on the approach of winter, if prices had remained low. While there can be no doubt, and indeed the curve itself shows that there was *some* demand choked off, yet the curve in a general way and trade experience over many years shows that, for a similar number of people, the demand for meat week by week is remarkably constant. A final point about these curves is that they lend support to the theory of inelasticity of demand. The rising price is clearly forced upon the consumer. If the demand for butcher's meat were elastic this could not be so easily accomplished.

Variations

In spite of its generally constant character, the demand for meat in London does vary day by day and also seasonally. The principal seasonal variation, both in the poorer and higher-class trades, is connected with Christmas. This is shown at the end of Curves 1 and 3 in Fig. I. In the higher class trade—the West End family butchers and Departmental Stores—demand is greater during the London Season (May to August inclusive)

than at other times. In the poorer class trade, which is the trade that handles the bulk of London's meat, demand is slackest on Bank Holidays—particularly August Bank holiday, which is responsible for the drop at the week ending August 9 in Curves 1 and 3. Apart from these variations we have the fact that in any week demand is much greater at the end of the week than at the beginning. But this does not apply to the high-class family butcher. In the shops I have especially studied the heaviest deliveries of meat are made on Tuesdays and Wednesdays, the lag between maximum deliveries of meat and maximum sales being rendered possible, even in summer, through refrigeration. It will not be out of place to mention here that refrigeration or cold storage is the physical basis of the meat trade in general and that it is largely responsible for the constancy and inconstancy (holding up) of supplies.

The question as to what extent weather induces variation in the retail trade is one of great complexity. Curve 4 (Fig. II) shows the variation in London's weekly mean maximum shade temperature from the week ending July 5, to the week ending December 27, 1924. Apart from the indication that during the first three weeks a hot spell appears to be associated with reduced demand, there is no suggestion of any obvious relationship. The rising price is, of course, a conflicting factor, but it will be noticed that during the period November 15 to December 13 prices (Curve 2, Fig. I) were practically constant, and that the quantities sold and total takings (Curves 1 and 3) were also practically constant, whereas the temperature varied greatly. The experience in the trade is that week by week weather does not have much effect on trade. It must be admitted, however, that the data put forward are very limited in extent, entirely due to the great difficulty of getting access to figures. The chief variation induced by weather is probably of a daily character. There may also be a winter and summer variation in normal years. On account of Wembley and a bad summer, 1924 was exceptional.

Curve 5 (Fig. II) shows the variation in atmospheric humidity, but neither this nor rainfall nor windiness, all of which I have studied statistically, appear to have much influence upon demand as a whole, week by week.

A very interesting aspect of trade variation is found to exist in connection with the individual shop. Curves 6 and 7 (Fig. III) show the variation in the quantities sold during the period previously described, at each of two shops, both of which do a cash trade. Shop A, however (Curve 6), situated at the corner

Logarithmic Curves of Total Weights of Meat Sold, Selling Price per lb., Total Sales, Weather Values and Individual Shop Weights

From week ending July 5 to week ending December 27, 1924. (See text.)

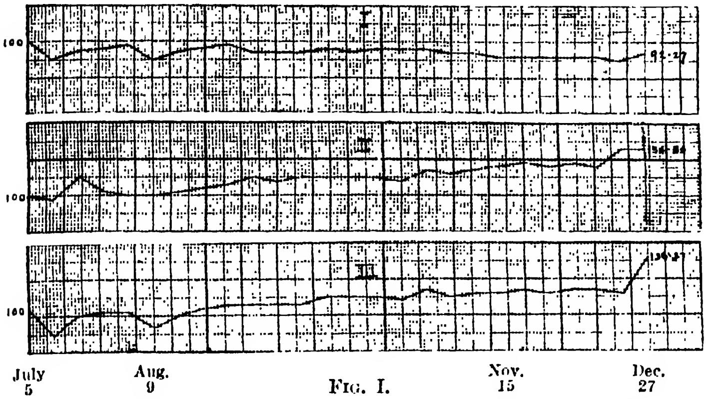

Fig. I.

Curve 1 : Weekly variation in the total weight of meat sold at sixty shops. Curve 2 : Weekly variation in average selling price per lb. Curve 3 : Weekly variation in turnover (total sales) at sixty shops.

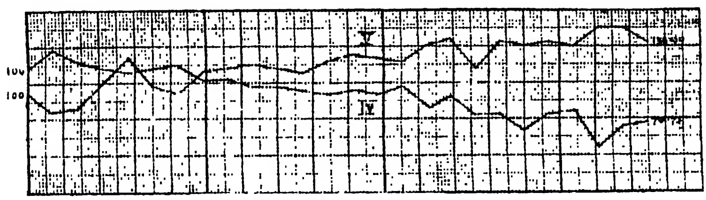

Fig. II.

Curve 4 : Weekly variation in weekly mean maximum shade temperature (Kew). Curve 5 : Weekly variation in weekly mean relative humidity (Kew).

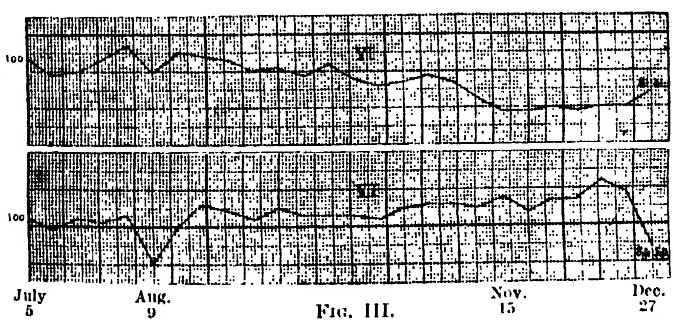

Fig. III.

Curve 6 : Weekly variation in weight of meat sold at an individual shop selling on an average 2,500 stones per week. Curve 7 : Weekly variation in weight of meat sold at an individual shop selling on an average 350 stones per week.

(All the above curves are plotted on the same scale. Equal vertical distances represent, not equal absolute increments, but equal proportional increments. The curves are strictly comparable, therefore, in regard to rate of increase or decrease. The figures at the end of each curve are the index-numbers for the last week, taking the first week's values as 100. This provides a scale whereby the percentage increase or decrease can be determined by inspection at any point on the curves.)

of Hoe Street and the Lea Bridge Road—a busy suburban centre in the north-east of London—sells about 2,500 stones of meat per week, whereas shop B (Curve 7), situated in a side street between Tottenham Court Road and Portland Place in the West End, sells only about 350 stones of meat per week. The weekly variation is very considerable and very different in the case of these individual shops. It would appear that rising prices choked off demand very considerably in the case of shop A, whereas in the case of the second shop there was not only no diminution of demand but an actual increase. The sudden fall at Christmas was probably due to the purchase of poultry at another shop (poulterers'). It is hoped that further studies will be made of this aspect of variation, for it is of very considerable interest and practical importance. Valuable results would accrue from the study of a large number of curves of individual shops, classifying the curves according to trend and investigating the circumstances common to different groups of tendencies. It may be mentioned that many factors are involved—the class and number of customers, shop management and capacity, competition, etc. In the trade, great importance is attached to the ability and personality of the shop manager.

The Source of Profit in the Retail Meat Trade

The main source of profit in the retail meat trade is centred in the circumstance that the consumer is willing to pay, at a certain place and at certain times convenient to himself, 25 per cent. to nearly 100 per cent. more per lb. for *certain parts* of a carcase of meat, in *small quantities at a time*, than these parts cost per lb. at the wholesale or commercial rate. This wide margin of gross profit holds for beef "cuts" like topside, silverside, sirloin and rump, and in the case of mutton "cuts" like leg, loin and shoulder. On most of the other "cuts," constituting 40 per cent. by weight of a dressed side of beef and 10 per cent. of a side of mutton, there is generally a very considerable gross loss. At the present time the gross profit on a side of chilled Argentine beef weighing 400 lbs., is about 33 per cent. calculated on prime cost—gross profit, of course, being the difference between total prime cost and total sales. On a side of English mutton the gross profit is about 27 per cent. on prime cost; on a side of New Zealand mutton, about 17 per cent. A group of sixty odd shops engaged in a busy cash trade might make a gross profit of £143,000, or 26 per cent. of the prime cost, which agrees fairly well with the previous figures.

A satisfactory margin of gross profit is general in retail trading, especially in the case of multiple or "chain" shops. But the absolute amount of gross profit naturally depends upon the turnover (or total sales). As a general rule this turnover is not only very large, but also very rapid in the London retail meat trade, except, perhaps, in the case of the individual family butcher, who does a slower and smaller trade than the average and depends upon a higher rate of profit per lb. He will sell beef which is mainly Scotch and net probably 1*d.* or slightly over per lb.; whereas in the "cash" or busy working-class trade the beef will be almost entirely chilled or frozen Argentine on which a profit of ½*d.* or slightly over will be made per lb.

A very important source of profit may centre in the buying of the meat at the wholesale market. Foresight in regard to future (temporary) shortage of supplies of a particular kind of meat, if acted upon, may lead to considerable future profit. This, under most circumstances, is a perfectly justifiable means of securing profit, in contrast to the retailing of foreign meat as English, which, although illegal, is frequently practised.

The Cost of Retailing

It is quite impossible, on account of the trade's organisation, to give any figure accurately and generally representing the cost involved in retailing London's meat supply. A reliable authority has stated, however, that 17·5 per cent. on sales may be accepted as a working basis. My own investigations lead me to consider this estimate, if anything, rather too high, but so much depends upon whether certain items are charged as a cost or to capital, that there is very little to be gained by discussing the point. In a multiple cash business, wages (of shop managers and assistants) is the predominant item, being about 8 to 10 per cent. of the sales. The chief remaining items, in descending order, are carriage (transport of meat from the central markets to the shops), head office expenses, electric light and rent. The net profit on sales probably lies between 5 and 7 per cent.

The Organisation of the Trade

Whatever the public may feel in regard to the profits accruing from the distribution of meat in London, the important fact must be recognised that the service is thoroughly effective and the public well provided for. There are, according to Millman, 4,000 meat shops in Greater London, and if we take the popu-

lation as being 8,000,000, it is evident that, on an average, there is one shop to every 2,000 persons. In some very small towns one finds a meat shop for every 1,000 persons, which would appear, from an economic point of view, to be quite unnecessary. In London the meat shops may be classified according to (*a*) ownership, and (*b*) class of trade. Under (*a*) we have the multiple or "chain" shops, the owner-managed shops and the Departmental Stores (meat departments); under (*b*), cash trade, and credit or family trade. The bulk of the London meat supply is distributed through the cash trade, and it may be mentioned that the Departmental Stores, unlike most shops in the other ownership categories, engage in both classes of trade. Of recent years the advent of the multiple shop has been a characteristic development, and, from the standpoint of efficiency and cleanliness, it has been a progressive development. Of the total number of meat shops in London, the great majority are singly owned or consist of small chains of three or four. As regards the very large multiple businesses, there are three or four companies, financially quite distinct, which operate anything from 40 to 100 shops each in Greater London. Taking into account the operations of the Departmental Stores, it will be evident, I think, that the earlier statement as to the existence of vigorous competition is justified. This competition, moreover, is not confined to that aspect of the trade which consists in the operation of shops: it holds good in regard to the wholesale purchase of meat at the Smithfield Central Markets. Here the retailers or their buyers secure their supplies each day, usually between the early hours of 4 a.m. and 6 a.m., and these supplies are delivered to the 4,000 selling points by the carrying firms mostly in three-ton motor lorries at a flat rate fixed by contract. In the case of the multiple shops in particular, the energy and organisation needed to keep this system moving is very considerable. A great deal of the efficiency, however, is due to the organisation and construction of Smithfield Market itself. This market can take in and despatch, if necessary, over 4,000 tons of meat a day. This very great capacity is a result, not so much of the absolute size of the market, as the large proportion of the floor area set aside for open traffic purposes and the great aggregate length of the stall frontages in proportion to the total length of the footways and pavements. A further point of efficiency lies in the fact that the market occupies a central geographical position and that London's main roadways converge upon it.

Distribution of Shops

From the standpoint of both economics and geography, one of the most interesting aspects of the London retail meat trade is the distribution of the shops in relation to demand and the wholesale market. In practice, demand, which is equivalent to turnover (or sales), is the dominant factor governing the distribution of shops; distance from the wholesale market, which involves the element of time and cost of carriage, is important but subsidiary within reasonable limits. Thus, in a well-organised multiple business, the annual turnover or sales may be, say, anything from £4,000 to £12,000 for a single shop, whereas, within limits, the carriage of the meat can be secured at a flat rate amounting to about $1\frac{1}{4}$ per cent. of the turnover, irrespective of the shop's position. Shops not personally managed by the owners, however, have to be constantly visited in connection with organisation, repairs and lighting: widely scattered shops therefore take up highly paid *time*, and in view of the fact that the large retailers of meat have their head offices at or near Smithfield, the distribution of shops in relation to the market, though not so important as distribution in relation to demand, is nevertheless a factor of considerable economic significance.

We will consider such studies as I have made in regard to the market aspect first. These have not been as comprehensive as might be desired, but they are nevertheless of some interest. The studies had relation to the shops of a large "multiple" firm, and two points were investigated: (*a*) the scatter of the shops, and (*b*) the differences between distance as the crow flies (net distance or displacement) and distance (quickest distance) by road. As regards (*a*), the positions of the sixty odd shops were determined on a two-inch to the mile map of London and these positions transferred to squared paper. By means of the formula

$$\bar{x} = \frac{\Sigma(mx)}{\Sigma(m)} \text{ and, } \bar{y} = \frac{\Sigma(my)}{\Sigma(m)}$$

the co-ordinates of the centre of gravity of the distribution were determined, x and y being the net distance of each shop (with appropriate sign) from the axes, the origin of which coincided with the geographical position of Smithfield; while m represents the average weight of meat sold at each shop in 1924. The co-ordinates obtained were $x = -0{\cdot}4$ and $y = 0{\cdot}5$. The practical interpretation of this is that Smithfield Market would have to be shifted only about 600 yards north-west of its present position in

order to be mathematically central in regard to the shops studied. It would be of interest to determine the degree of centrality of Smithfield for all retailing centres in London. In all probability it would be found to be very high.

Concerning (*b*), the average excess of road distance over "net" distance in respect of Smithfield was found to be 1·25 miles, and the range of variation 0·1 mile to 3·40 miles (64 shops). Shops located in the same district may vary in this respect enormously and the geographical reasons can be readily determined.

Distribution in relation to demand is governed by distribution and density of population, purchasing power, standard of living, public transport and the presence of other shops. In the cash or working-class trade I have found indications of correlation between turnover and density plus poverty. That is, the shops doing the biggest trade tend to lie in London's poorest and most densely populated Wards. In the case of the shops studied, I found no relationship between turnover and "flow" of population, though it should be mentioned that only the presence or absence of 'bus and tram routes was taken as an index of "flow": pavement counts were not made.

A characteristic feature of the distribution of London's meat shops is that the cash shops are invariably found in the busiest streets of the poorer districts, the high-class family butchers in the quieter side-streets of the wealthier districts, while the Departmental Stores are found in the busiest streets of the West End. Meat shops of the cash type seldom occur singly, but in clusters of anything from two to as many as twelve. The meat shops of London are not evenly distributed. Four shops of one firm may be found quite close together in the same street, all in active competition in spite of common ownership.

The Question of State or Municipal Trading

Attention has been called to the effective character of the London meat trade. A final point to be considered in this paper is its general economy and efficiency. Under Organisation reference was made to the number of shops in relation to a town's population, and in the previous section the unevenness of distribution was briefly noted. May there not be more meat shops in London than is economically necessary? In many small towns there undoubtedly are, and it may be true of London also. The question is a big one and demands investigation. It is probable that economies could be effected, not only from a

trade point of view, but from the wider aspect of better utilisation of the nation's man-power. This applies to British retail trades in general.

It has been claimed that most benefit would accrue to the consumer as the result of Municipal or State trading. The only attempt that has been made in this direction on a considerable scale is, so far as I am aware, in Queensland, Australia. A brief discussion of this enterprise may be permissible. The Report of the State Trade Department of Queensland for the year ending June 1924 contains the accumulated profit and loss account, the balance sheet and other particulars of the State Butchers' Shops, as well as similar information in regard to other State enterprises, including the State Pastoral Stations designed to supply the State shops with meat. So far as one is able to judge, the retailing enterprise (but not the producing one) is financially and economically sound, and, so far as the phrase can be used in regard to State enterprise, it has proved a commercial success. The enterprise has been in operation for 8½ years, and last year there were 57 shops open. Meat is sold at from 1*d*. to 2*d*. per lb. less than the shops run by private enterprise, and the net profit per lb. over eight years has been 0·2*d*. and the profit on turnover (sales) 4·05 per cent., against, say, 0·75*d*. per lb. and 6 per cent. in London at the present time. From the fact that the number of State shops has increased from 27 to 57 in six years, without any great increase in population, would make it appear that the shops are popular and that they are tending to take the place of private enterprise. But one cannot jump at the conclusion that what answers in one place will necessarily do so in another. In Queensland, which contains only some 811,000 inhabitants, economic conditions are relatively simple, while politically the majority of the people are "socialistic." Economic conditions in London are not simple, and whatever the polls may say, the people of London are not socialistic in so far as shopping is concerned: they are fundamentally competitive and individualistic. One of the great difficulties of Municipal shops in London would be to give satisfaction. This difficulty would probably arise during temporary shortages of supplies, and also during "rush" hours, especially on Saturday morning. In contrasting the Queensland State shops with London shops it has to be borne in mind that the latter are much more busy than the former. I calculate the average number of customers per week per shop in Queensland to be 1,237 compared with 3,192 per shop (average of ten cash shops) in London. But I think the great difference

between the Queensland retail meat trade and that of London lies in the fact that Queensland produces all her own meat and also exports a large surplus. In London—in England—the reverse is the case, and that makes any State interference with existing trade extremely dangerous. For the present I think the most essential need in regard to the London retail meat trade, and indeed all economic questions, is to study them as scientifically and as impartially as we can, so that we have knowledge rather than opinion to guide all concerned in the gradual introduction of reforms.

W. R. DUNLOP

(The writer is indebted to Mr. F. W. Lawe, B.A. (Cantab.), for reading through the manuscript of this paper, and for useful criticisms and suggestions in regard to several points of importance.)

REVIEWS

Der Wirtschaftende Mensch in der Geschichte. Gesammelte Reden und Aufsätze von Lujo Brentano.

THESE collected addresses and essays are the work of one of the most remarkable and vigorous personalities in Germany. Professor Brentano, who is now in his eighty-first year, has only recently resigned his Chair at Munich University. He still retains all the fire and enthusiasm of youth, nor does age appear to have lessened either his capacity or willingness for controversy, as witness the very forceful series of articles on the eight-hour day contributed in 1923 to the *Soziale Praxis* and subsequently published as a pamphlet.

Brentano is mainly known to English-speaking peoples as the author of a work on the English guilds, which appeared as long ago as 1870. In Germany his fame amongst a public, far wider than that to be found in academic circles only, rests chiefly on his courageous and untiring championship of two unpopular causes, which only a bold man would have ventured to advocate from his academic Chair in pre-war Germany—free trade and the development and recognition of trade unionism.

The present volume (one of a series in commemoration of his eightieth birthday) shows a different side of his activities. Here we find Brentano, the economic historian, displaying great erudition in his study of the origins and growth of capitalistic enterprise. The titles of some of the papers indicate the wide field over which he ranges: "Ethics and Economics in History," "The Economic Doctrines of the Early Christian Church," "The Beginnings of Modern Capitalism," "The Conception and Evolution of the Economic Unit," "The Fourth Crusade." The last three papers deal with the relations between Trade, Puritanism and the Jews, and the growth of Capitalism.

There is a distinct unity both of treatment and subject in many of the essays, and a good deal of perhaps unavoidable overlapping and repetition.

Brentano's explanation of the development of capitalism is bound up with his conception of the economic units and the changes which have taken place therein. In his view the earliest

economic unit is the patriarchal family, from which developed, on the one hand, enlarged economic units such as the manor, the guild, the town and eventually the state, and on the other hand, the gradual individualisation of property which led to the emergence of the restricted family unit, and, in modern times, even to the legal recognition of the right of the wife to own property independent of the husband. The normal characteristics of the economic unit are that its internal relations are governed by tradition and authority, its external relations by the economic principle—the desire for the greatest possible profit. So long as an economic unit is self-sufficient, as in the early patriarchal family or the manor, a communist system prevails, controlled and directed by the tradition and authority of the head of the unit, but as soon as it ceases to be self-sufficing and begins to buy from and sell to external units, the economic principle assumes undivided sway. This in turn reacts upon the structure of the unit itself and tends to break it up into smaller units, each permeated by the economic principle, which is itself the essence of the capitalistic spirit. This process is the direct issue of trade, which thus appears as the father of all capitalism. Modern Capitalism is defined by Brentano as "the capitalism which has developed in the West with the revival of the monetary economy in the Middle Ages," in contrast to the economic system of feudalism based on a self-sufficing economy (*Naturalwirtschaft*). He regards the development of modern capitalism as the product of these main factors: Trade, the Lending of Money at Interest, and War. This thesis is defended with much learning and cogency of argument in the last three essays, in which he attacks the opposing views of Sombart and (so far as the growth of the capitalist spirit is concerned) of Max Weber. There is a great contrast in the tone of these essays. The views of Max Weber are treated with respect, though subjected to a close and reasoned criticism, but Sombart's extravagances are scarified in a brilliant polemic. It is unfortunate that Brentano's references are all to the first edition of the *Moderne Kapitalismus*, since some of Sombart's most daring hypotheses and interpretations are modified in the second edition, which appeared in 1922. The main essentials of Sombart's position, however, have been carried over unaltered into the second edition.

The views of Brentano and Sombart diverge fundamentally in regard to the sources of modern capitalism. Sombart holds that capitalism arose in contrast, not to feudalism, but to the

handicrafts as exemplified in the guilds, and declares that most even of mediæval trade was imbued with the handicraft as contrasted with the capitalistic spirit. The essence of the handicraft was the acceptance of a customary and traditional scale of living, and the dominant thought of every craftsman was that his craft should provide a sufficiency of existence in accordance with the needs of his position. Income was limited to a traditional expenditure, and neither the trader nor the craftsman sought to exceed the established norm. Partly for this reason, and partly because of the small scale of trade in mediæval times, it is necessary to look to sources other than those of trade, such as ground rents, luxury, accumulation of royal treasure, the exploitation of colonial possessions, etc., for the growth of wealth on which modern capitalism was based. Brentano holds that this is a completely incorrect interpretation of history. Not merely the mediæval trader but also the mediæval craftsman have always, so far as circumstances allowed them, been imbued with the economic principle. The craftsman and even the trader were, however, constrained by the authority of the guilds and of the town authorities to follow certain traditional and customary principles wherever they sold inside their own economic unit. The city authorities, guildsmen though they were, sought to gain the maximum profit obtainable whenever they had to do with strangers, *i. e.* with individuals *outside* their own economic unit. Brentano denies that the profits of mediæval traders were so small that they could not have found the basis of a great accumulation of wealth. He points in confirmation to the rôle of Venice in the Crusades, and particularly the fourth Crusade, from which she drew enormous profits, partly from trading concessions extracted from the Byzantine Empire, partly from the charter of ships to transport the Crusaders, and partly from the participation in the booty which the Crusaders brought back with them. He traces the growth of the trading cities of Italy—Ravenna, Naples, Amalfi, Pisa and Venice—and shows that, in relation to the economic condition of the time, their trading operations were on a great scale and brought them both wealth and power in a high degree—all this long before the year 1204, from which Sombart (in one of his books) has dated the beginning of modern capitalism. Brentano's own conclusions are best given in his own words: "The desire for goods in excess of personal requirements is not something impersonal which emanates from capital as such. It is in the highest degree a personal quality, for it has its roots deep

in human nature in that desire, to be found in men of all races and all peoples, for distinction and domination. It does not appear for the first time in the capitalist epoch; it existed in this as in all previous epochs. The change which the existing capitalist economy has brought about consists merely in the different direction which it has given to this desire. In the measure in which trade permeates the other branches of economic activity, money, the means of production with which the trader operates . . . has become more and more important for the other branches, and with it comes the desire for an unlimited money profit in the place of the (older) desire for unlimited landownership; and in the degree to which trade has broken up the old economic units, all the remaining members have been seized with the desire for the greatest possible profit."

Sombart's views on the connection between the Jews and capitalism are attacked by Brentano with an acrimony that seems to indicate a certain degree of prejudice and a scarcely open mind on this question. He says of Sombart's book, *Die Juden und das Wirtschaftsleben*: "The book is full of the frivolities of an arrogant individual, who, deeming himself to be a superman, blows the soap-bubbles of his capricious humours into the face of his dazzled reader, and in addition demands from him that he shall accept his conceits as 'irrefutably correct' scientific statements."

Sombart has allocated to the Jews a very special rôle in the evolution of capitalism. From time immemorial they have been the incarnation of the capitalist spirit, a spirit which he explicitly declares to be contrary to the natural state of man. The origin of this is to be found in the Jewish religion, with its calculating contractual conception of the relations between God and man, and the dualism of its ethical and worldly codes. To whichever land the Jews migrated in Europe, there capitalism and wealth soon developed, while prosperity fled from the land which they deserted. Brentano, on the other hand, goes so far as to deny by implication that the Jews have any special characteristics differentiating them from other peoples, above all he pours scorn on the theory that they were and have remained a desert people. Dualism is to be found in all religions and is not a specific characteristic of the Jewish faith. The undoubted importance of the Jews in economic development has been due to their being always strangers in the lands where they settled, therefore usury was permitted to them, nor were they subject to any of the restrictions on profit imposed by the guilds, from

which they were always excluded. As traders and money-lenders, and by virtue of their international connections, they were able to amass great wealth and enrich the peoples among whom they settled. Their migrations from one trading centre to another were rather the effect than the cause of changes in commercial prosperity due to underlying economic and political force.

Finally, Brentano turns to the views of Max Weber and disputes the unique influence on the growth of capitalism which the latter attributes to the ethical trading of Puritanism and the Reformed Church. While it is true that the Puritans held that idleness and luxury, if not actually sinful, were very dangerous, and that the certainty of grace lay only in hard and continuous work and the accumulation of wealth honestly earned, Weber is wrong in supposing that there is any direct connection between this teaching and the capitalist spirit. The writings of men such as Baxter, Bunger and Benjamin Franklin show that they by no means regarded the pursuit of wealth as a thing which is good in itself and to be attained for its own sake, but solely for the honour and glory of God. The chief characteristics of Puritanism are to be found, on the one hand, in the condemnation of every kind of enjoyment, and on the other hand in the teaching that mankind was born into the world, not to flee from it but to do its duty in it. Teaching of this order has nothing to do with the spirit of modern capitalism, even though in practice it may have contributed to the growth of wealth and thus helped on the progress of capitalism in the countries coming under its influence.

The views of Sombart and of Max Weber as to the origins of modern capitalism are familiar to many scholars in England and the United States and have found a good deal of credence in some quarters in these countries, as well as in Germany. The reprinting of these papers is therefore very welcome in that it makes accessible the criticism of a learned and sincere exponent of what may be regarded as the conservative doctrine on this important subject. At the same time, while admitting that many of Brentano's criticisms are well founded, it is impossible to deny to Sombart, in particular, a large measure of recognition on the ground that his work is the product of a vast amount of research into a side of economic history that had been much neglected before his books appeared, and that he has thrown a flood of light on the history of modern capitalism, especially by the emphasis he has given to the influence of war and luxury.

The attractiveness of this volume is enhanced by the clarity and vigorousness of the style and by the welcome and uncommon fact that it is really well printed. The only criticism that must be passed on the arrangement of the work is the absence of a date to many of the papers—a serious omission when, as in this case, they extend over a period of many years.

C. W. GUILLEBAUD

Konkrete Grundbedingungen der Volkswirtschaft. Gesammelte Aufsätze von LUJO BRENTANO. (Verlag von Felix Meiner, Leipzig. Pp. 505. 12 marks.)

IN this volume four essays by Professor Brentano, previously published in German scientific periodicals, are reprinted with a few additional observations. Of these, the first three are concerned with certain basic conditions which govern economic development—the nature and origins of the economic structure of nations; the theory of wants; the doctrine of population—and the last with the evolution of the theory of value.

In his first essay the writer criticises both the Socialist view of the origins of the *Volkswirtschaft*, and what he terms the individualistic-atomistic theory of the Classical School of Economists, which regards the national economy of a people as compounded of the sum of the separate *Wirtschaften* of the component individuals linked together by exchange and the division of labour. Brentano argues cogently that the land in which a people live, their culture, technique, laws, and State institutions, influence and condition their economic activities and cause a nation to become an economic unit, differentiated from other economic units composed of peoples subjected to different historical influences and environment. In emphasising the need for the study of the historical and other forces which affect the working out of economic principles in each country, he supplies a valuable corrective to that inherited tendency of English economic teaching and practice to treat economic principles as though they had universal and uniform applicability under every variety of conditions. The main part of the essay, however, is devoted to a discussion of the origins of human society, and to an attack on the doctrines of Morgan and other distinguished anthropologists, who have held that the classificatory system denoting relationship, which has been observed in Hawaii, affords proof that the original social group was the horde in which complete sexual promiscuity reigned. Brentano contends that

Morgan's conclusions do not follow logically from the facts the latter describes, and brings forward a good deal of evidence to show that the earliest unit is the monogamous family. This is a type of speculation, however, which has the dubious merit of being completely incapable of proof, seeing that none of the savage communities of recent times can be regarded as being truly primitive. The imposing list of authorities whom the author quotes testifies to the extent of his researches, though the absence of certain names, notably Frazer, Rivers, Spencer and Gillan, and Strehlow, is surprising in view of the importance of their contributions to this problem. Although most of his reasoning is based on anthropological considerations, he makes a number of acute observations, in regard to certain economic aspects of primitive life, which should prove of interest to economists and anthropologists alike.

In the essay on the "Theory of Wants," Brentano reveals himself an out-and-out utilitarian and adherent of the hedonist calculus of pleasure and pain as the mainspring of all economic activity. He attempts a classification of the wants of mankind in the order of their intensity and gives a high place in his series to the desire for distinction. His observations on luxury are of special interest, and he performs a service in drawing attention to the too little-known essay of Roscher on the "Evolution of Luxury" printed in the latter's "*Ansichten.*" It is to be regretted that the author should have neglected to notice the criticisms urged by most modern psychologists against the utilitarian theory, criticisms which have even led to the claim being put forward that the whole psychological basis of economics requires to be rewritten in the light of the new and fundamental importance attributed to instinct as the chief cause of human activities.

Economists generally will perhaps be most interested in the long paper on the doctrine of population which amplifies the views expressed by Brentano in the ECONOMIC JOURNAL of September 1910. The present paper is furnished with a statistical appendix containing a large amount of valuable information in regard to movements of population, births and deaths, etc. in different countries. The correlation observed for certain countries between birth-rates and figures of emigration and immigration is specially noteworthy. Brentano shows himself a convinced and acute critic of Malthus and the Neo-Malthusians, though it may be doubted whether the former really held all the views here attributed to him. He brings much evidence to prove that

marriage- birth- and death-rates are everywhere lower in the more prosperous than in the less prosperous countries, and are lower amongst those sections of a people which are relatively well-to-do than amongst those which stand low in the scale of well-being. He denies that these facts are due to any appreciable extent to physiological causes, and holds that they are to be attributed to deliberate and voluntary action on the part of potential parents, whose rising standards of life, brought about by the general increase in well-being during the last half-century, have led them to give preference to other wants than those of marrying and procreating large families. In championing the expansion of prosperity and higher standards of living as the predominant and all-important factor influencing the growth of population, Brentano does scant justice to other forces. He declares roundly that "differences in race, in religious faith, in occupation, in place of residence, and changes therein, which, it has been contended, can explain the diminution (of births), are seen when looked at more closely to be differences and changes in conditions of prosperity." But even if his main thesis as to the fundamental importance of prosperity be admitted, it is surely true that racial and religious factors, for example, have played a large rôle in determining the *tempo* at which changes have taken place in different countries, or even within the same country. In a curious argument Brentano contends that a deliberate restriction of the birth-rate on the part of the working-classes would be powerless to improve their conditions, on the ground that, except where—as in Australia—Government was mainly influenced by Labour, the only result would be the immigration of low-grade labour from other countries. A decline in the birth-rate, he holds, is only to be achieved by an improvement in the well-being of these classes, of which indeed it must be an inevitable consequence; it cannot, however, be regarded as a cause. Brentano fails to throw any light on the important question why in almost every country inhabited by people of European stock the birth-rate should have fallen steeply since the end of the 'seventies of the last century, in spite of every variety of social and economic conditions and of very widely differing rates of increase of prosperity. In England in particular the well-being of the masses had been increasing rapidly since the beginning of the second quarter of the nineteenth century; why did the birth-rate only begin to fall continuously after 1876? Can the sudden spread of the knowledge of means of preventing conception, which some writers have suggested as an

explanation of the English figures, be regarded as applicable to France, where the decline was in process throughout the nineteenth century, or to other countries such as Austria, Hungary and Italy? Is it impossible that a change in birth-rates should come about independently of a change in prosperity? While not giving any definition of over-population, Brentano holds that the figures and arguments he puts forward, establishing a causal connection between births and prosperity, definitely remove all fear of over-population in progressive countries. There remains, however, the danger that the nations belonging to the ruling European stocks may lose their supremacy owing to the decrease in their populations, and may even ultimately die out. He regards as the only solution for this "an economic policy as a result of which a low birth-rate accompanied by a low mortality-rate will lead to a greater excess of births over deaths than in the more retrograde countries with their higher birth- and death-rates." If European civilisation ever becomes economically unprogressive, the danger of the extinction of the present ruling races will be a real one. He passes over in silence a number of important problems, such as the political consequences, in democratic countries, or the eugenic effects of a much lower birth-rate amongst the upper and middle classes in all countries than amongst the working classes; the possibility that in the course of time the birth-rate, even in progressive countries, may sink below any death-rate to which it may be possible ultimately to attain; and the effects of a low birth- and death-rate in increasing the proportion of those who are old and past work to the productive part of the population.

The fourth essay is concerned with the history and evolution of the theory of value from Aristotle onwards. The most valuable section is that which deals with the pre-physiocratic period. A good deal of importance is accorded to the Italian economist Galieni, who is described as "the most brilliant of all economists." The treatment of modern developments illustrates the wide divergence between English and German views on this subject. The work of Ricardo and the Classical School is taken purely at face value as the final and logical expression of the (incorrect) objective cost theory of value. Brentano claims for Gossen the credit of being the first to formulate clearly the notion of marginal utility, and devotes many pages to an exposition of Gossen's views, with which he is in substantial agreement. Of English economists, Jevons alone is dealt with at any length, while Marshall's contributions to the theory of value are dismissed in

the following sentence: "Since 1869 Professor Alfred Marshall taught in Cambridge a theory of value based on the principle of diminishing utility."

C. W. GUILLEBAUD

Erotemi di Economia. Vol. I. By MAFFEO PANTALEONI. (Laterza; Bari. 1925. Pp. xi + 382.)

As he wrote the preface to this book, Pantaleoni was conscious of the lengthening shadows of evening. "When the fisherman draws in his nets, he has finished his day's work." But in Pantaleoni's case there is a good take of *mista mare.*

He had arranged before his death for some of his writings to be republished in four volumes, of which this is the first. The second, like the first, is to be theoretical; the third historical; the fourth financial and statistical. He belonged to an older generation of economists, which was not much vexed by incertitudes or intellectual hesitations. He followed his teacher Ferrara in identifying "economic science" with "the theory of value," or, making as he thought some slight concession to modernity, with "the theory of economic equilibrium." He and his like recall a saying of Dicey to a younger Oxford don: "I fancy that my generation thought more clearly, if not more deeply, than yours." In prevailing methods of thought there is much parallel drift in different countries and in different branches of study.

One of the best essays in this book is that "On the Character of Differences of Opinion among Economists." "There are no 'schools' in economics, or, rather, there are only two, those who know economics and those who don't." The former have an ever-lengthening tract of road which they can tread in common. At the extremities there are controversies, not only in economics but in every science. For at the one end lie first principles, the basis of individual philosophies, "which in each of us are the product of the whole range of our studies and in which echoes also our own personality." And at the other end are "the ultimate problems, which stand at the limits of our knowledge and are chosen for attack by each of us according to our special talents and genius." In spite of the progress of medical science, doctors often disagree in their diagnosis of an illness and in the remedies which they prescribe. It is the same in economics, where symptoms are statistical and often hard to read. The progress of economics since Ricardo's day is mainly to be found

in the increasing span of our generalisations and in our greater capacity to explain economic phenomena. "The differences which may be observed between economists are reducible, in substance, to this, that all have not the same taste for generalisation. They are like people living in the same house, but on different floors. Those who live on the top floor do not deny the existence of the view which can be seen from the first floor, but the converse of this proposition is not always true."

In a discussion of the manner in which the history of economic thought should be written, Pantaleoni maintains that the erroneous theories of the past have no interest for us and should be excluded. If, however, such a history is written, not by an economist, but by a historian pure and simple, "then for him every fact is of equal value and it would be a demerit to exclude false doctrines. Moreover, he cannot tell what doctrines *are* false and what are true, since history throws no light on such questions!" This vivacious essay provoked replies, and in an appendix to it, written round Cossa's *History of Economic Doctrines*, Pantaleoni quotes a letter from Pareto maintaining that "the history of past errors is helpful in enabling us to avoid new errors springing from the same causes," and another from Loria who also dissented. He gives a delightful characterisation of Cossa, who was one of his own teachers. "No man was more capable than he of understanding books which he could never have written, and of explaining them better than their authors could have done. He understood everything, but could produce nothing. He had read everything, but he was stricken with sterility in the very marrow of his bones. Without ambition and without envy, he had only one desire, to be useful to others, and especially to the young. To them he suggested theses, he lent them books, he gave them money prizes, he secured posts for them. His was an admirable character, which is rare in a man of science."

Pantaleoni's "Analysis of the Concepts 'Strong' and 'Weak' in Economics," which is also republished in this book, first appeared in the ECONOMIC JOURNAL in June 1898. He criticises Marshall's views on the bargaining power of labour and concludes that, where contracts, including wage contracts, are concerned, it is meaningless to speak of the relative "strength" or "weakness" of the parties. "If one party is stronger than the other and knows his strength, he will not enter into a contract, but will make use of his strength." This line of thought is typical of Pantaleoni. It is no surprise that, in his declining years, he

caught the Fascist fever. In the second essay of the present volume he notes with contempt that " nearly all economists have been pacifists." But " war is still a normal function of the lives of modern civilised societies and can bring, directly and indirectly, economic gains which far outweigh their cost." Moreover, " war, in my opinion, has a cultural and moral effect of the first order. It enforces co-ordination and subordination, imposes costs and sacrifices, distributes prizes and pains, to the exclusion of all ethics, and of all public and private rights based on verbal sophistries, or on feelings of individual benevolence, or on humanitarian sentiments, which are only signs of weakness in the nervous system, or on metaphysical principles, or on religious ideas. War recalls to reality the thoughts, the feelings and the imaginations of men." The academic life breeds many pathological curiosities. This senile Sadism of the study is one of them. One would like to think that such sentiments only moved his young men to laughter. But it is more likely that he helped to corrupt them, and to dig their graves.

HUGH DALTON

Gesammelte Aufsätze zur Soziologie und Sozialpolitik. By MAX WEBER. (Tübingen: Verlag von J. C. B. Mohr. 1924. Pp. iv + 518.)

THE first of this collection of essays deals with the action and reaction of industry on human life and character. What kind of persons, it is asked, does modern industry produce? And on the other hand, how is the development of industry conditioned by the racial and social characteristics, by the habits and traditions of the working population? After a special warning that the method of inquiry must be strictly objective and detached, and that results must not be prejudged, Weber proceeds to discuss the psycho-physics of the industrial worker: the problems of industrial fatigue, of skill acquired by practice, of the influence of noise and the effects of monotony. It is generally assumed that Anglo-Saxons can endure monotony better than the Latin races, and Weber holds that women on the whole put up with it better than men, although elderly married men appear actually to welcome it, if it be combined with a measure of security. The influence of sex, age and family are all passed in review. The question of inherited aptitudes for certain kinds of manual labour presents special difficulties, since what appear to be congenital characteristics are often the

results of unconscious imitation. Weber concludes that though his observations yield some results, yet much more material and data covering a much wider field are required. Since then we have seen the rise of the American efficiency engineer with his studies in scientific management, the labours of the Industrial Fatigue Research Board, and similar statistical investigations in the United States and elsewhere, so that Weber's essay, written in 1908, already appears somewhat antiquated.

The Stock Exchange and the Produce Markets have witnessed no such revolution, so that the essay on "*Die Börse,*" written as long ago as 1894, is by no means out of date to-day. Primitive man covered his personal needs by means of his own labour: to-day everyone produces what others will consume, and himself consumes the product of the labour of countless others. This fundamental fact explains the whole development which begins with the pedlar and ends with the World Exchanges. With surprising clarity and simplicity of language Weber gives a detailed account of the working of the Stock Exchange and the Produce Exchanges. He describes the British and American Exchanges with their onerous conditions of entry and their insistence on the personal responsibility of their members, and contrasts with these the democratic Continental Exchanges, open to any comer, almost to any vagrant in the financial world. The Continental Exchanges are the happy hunting-ground of the small speculator—out to make a fortune on margins—who serves no useful purpose, and whose gains are a needless tax on the community. The abuse of a system by individuals, however, does not destroy the value of the institution, and Weber holds that the Exchanges are indispensable to modern civilisation. Strict regulation and a higher sense of responsibility than obtains in Continental countries are the first *desiderata*, and these are, apparently, not to be achieved by State control. The essay ends on a pessimistic note—a powerful Exchange is not an Ethical Club, nor is a great Bank a Welfare Institute. For this Weber blames the economic struggle between nations.

The concluding essay is an address on Socialism delivered by the author in Vienna in 1918. Until to-day Socialism has cheated all its prophets and disappointed the hopes of even its most modest votaries. At Brest-Litowsk, Weber maintains, Germany was acting in perfect good faith, and even if some Germans welcomed Bolshevism as the kind of experiment to which they were only too willing to concede an opportunity of proving its inherent futility, impartial economists like himself

looked on with interest, willing to be converted if the experiment should prove successful. On the subject of Revolution, of Communism, and of the Dictatorship of the Proletariat, Weber has nothing startlingly new to say. He holds that Socialist hopes, however often they may be disappointed, can never perish, since every Trade Unionist must, in a sense, be a Socialist. But success is not likely ever to be achieved, and Socialism like a will-o'-the-wisp leads men on, retreating as fast as they advance.

H. REYNARD

Peace and Goodwill in Industry. Three speeches by the RT. HON. STANLEY BALDWIN, M.P., Prime Minister, March, 1925. (London: George Allen & Unwin, Ltd. 1925. Pp. 79. 1*s*. 6*d*. net.)

THOSE whose memories go back to the fight for "the docker's tanner" will recall how from time to time the labour struggle for better conditions has burst into a storm of revolutionary fervour, seeking rather the ultimate transformation than the immediate amelioration of society. Mr. Baldwin has done his utmost to make a different and better atmosphere in the three speeches delivered by him in March, reprinted in this little book, and another, delivered at Welbeck Abbey on June 1st, which is an inseparable part of the series. These speeches were an appeal for "peace in the country between all classes of the community," for stability, for confidence, for the ending of suspicion, and for the earnest effort of the associations of employers and employees to find solutions for their present troubles. They have met with a remarkable response, and if the mutterings of the storm have not entirely ceased, it must be remembered that the economic atmosphere can never be in a state of perfect calm. There is a sense, it is true, in which there is a harmony of interest between not only employers and employed, but also all classes of the community; nevertheless there is a sense in which the interests of all classes are diverse. It is in the interest of all that industry and trade, production and distribution, should be maintained at the highest pitch of productivity, but there is a marked divergence of views between manufacturers, merchants and retailers, as well as between masters and men, as to the manner in which the products of labour and capital are to be shared. In Hegelian unity of opposites we may say that within the organic harmony there is a "war of classes" rather than "a class war," with the limited meaning it has to-day, and the warfare is embittered

when there are extremists on the one side who, in despair at the evils of society, have no other aim than to pull down, and extremists on the other who, in their terror of change, have no other thought than to keep down. The great middle mass of men who are willing to contend without violence and to yield or win in gradual change are apt to be unconsidered amid the war-cries of the two extreme wings.

Mr. Baldwin has been accused of seeking stagnation, of desiring the perpetuation of things as they are. No charge could be more unfair, as these speeches themselves show, where he repeatedly and explicitly recognises that industry is in a state of evolution. The " capitalist system " did not spring fully equipped from the brain of Plutus, and it is in our own time that we have seen the great change from severalty to concentration in business and from unorganised to highly organised labour. Mr. Baldwin, quite naturally and properly, lays emphasis on the great benefits which have come in the course of this development, while not overlooking the evils which, equally naturally, fill the sight of their victims. He does not look for a fundamental change in the basis of society, but for a closer partnership between employers and employed which may put an end to the great economic evil of to-day, " that we do not yet produce enough to give to every family the standard of life which we should all desire to see it enjoy."

Greater production depends on greater efficiency, that is, on the avoidance of waste. In the circumstances of his speeches Mr. Baldwin was mainly concerned with the waste arising from industrial strife : " You can," he said at Welbeck Abbey, " dissipate and waste the capital of the country just as much by indulging in strife at home as you can by waging war in France and Flanders." But there are other forms of waste, some of which Mr. Baldwin has also dealt with. There is the waste arising from personal inefficiency and inattention to business on the part of employers, on which Dr. Shadwell has written with some pungency, and as to which Mr. Baldwin said at Welbeck Abbey that " efficiency and management in this country in most industries can be raised ten per cent. very easily, and the effect of that on production would be enormous." There is the waste arising from competition between businesses, of which a recent example may be found in the address of the chairman of the British Oil & Cake Mills, Ltd., on June 15, when he told his shareholders that by the amalgamation of their company with Lever Brothers, Ltd., they were guaranteed 12½ per cent. on

their capital, whereas in separate operation they could not look forward to more than 8 or 10 per cent. There is the waste arising from lack of co-operation between different industries, as to which the success of the Deutsche Werfte in securing the Furness-Withy motor-ship contracts has taught us some lessons. There is the waste arising from speculation, whereon the chairman of the United Premier Oil & Cake Co., Ltd., may be quoted. "Speculation," he said (June 17), "probably without precedent, in the commodities which we handle has made it most difficult to run our business on ordinary commercial lines. If we cannot check speculation in the raw material, I do think that by careful collaboration with others a considerable check can be placed on speculation in our products." Finally, not to extend the list too far, there is the waste arising from under-payment and unemployment, both of which sap the efficiency of the work-people affected.

Mr. Baldwin has repeatedly urged the inevitability of further combination in industry; most notably he said at Welbeck Abbey: "Businesses in the same trade will have to come together, they will have to concentrate on modern plant, they will have to scrap the old, and nothing but the using of the best brains among them and the best endeavours on the part of all concerned will enable us to pull through these times." Such concentration cannot be limited, must not be limited, to the same trade, but there is one important consequence which is often overlooked. Family businesses which do not perish generally reach the company form, whether in an amalgamation or not. For the first period in the new organisation the old owners usually reserve control to themselves by retaining a governing proportion (not necessarily a majority) of the shares, and the outside investor who comes in has little power. Gradually, however, the family holdings are dispersed and the company may be owned by some thousands of investors wth scanty opportunities and scantier means for forming business policies. Sovereignty cannot reside in a mob-meeting and much less in the scattered items of a mob. In such circumstances how is the paid management to be inspired, how is it to be controlled? Is the Board of Directors to be appointed by an organised minority who have seized power at a members' meeting, or is control to be secured by piratical raids on the Stock Exchange? Mr. Baldwin gave a useful definition of the function of industry in the modern State when he said: "It is to produce and to distribute goods and services which are wanted by the community, and to do

it in such a way as to react most favourably on the livelihood and the life of all concerned." Hitherto this function has been in the hands of owners of capital who were at the same time, and in virtue of that ownership, the directors of industry. To-day, the ownership of capital tends to be divorced from direction of industry, which is entrusted ever more and more to paid managers. This is a problem which must affect those meetings of the associations of employers and men which Mr. Baldwin desires to see to-day; it must still more profoundly affect that "close partnership" which he expects to be the industrial form of the future. Trade union rules, the relations of wages in different occupations, the publicity of costs, the monotony of division of labour, "taking the workers more and more into consultation in matters of routine management through the works committees"—these are all important questions which will not be solved in one meeting, and while employers and men are solving them, economists would be well advised to give some attention to the greater and more subtle change in the form of capital. If business is to abandon the policy of "anyhow" it must have the support of sound economic analysis.

It is a great advantage to have the three March speeches in such a compact and, to use an abused word, elegant form, and an appeal may be made to the publishers to include in future editions the Welbeck Abbey speech, in some respects the most important of the series.

H. W. DROSTAN

The Theory of the Leisure Class. By THORSTEIN VEBLEN. (London: George Allen & Unwin, Ltd. 1924. Pp. viii + 404.)

THIS book was originally published in 1899, since when it had been reprinted nine times. "A Theory of the Leisure Class" would perhaps have been a more appropriate title than "The Theory," since Mr. Veblen does not discuss or refer to any theory other than his own. The institution of a leisure class, he tells us, has emerged gradually during the transition from primitive savagery to barbarism; its conditions are a predatory habit of life, and a climate sufficiently generous to enable a considerable portion of the community to live on the proceeds of the labour of the remainder. The leisure class lives by owning, first women, then slaves and finally material goods. Since individual powers of consumption are limited, the real motive

at the root of ownership is emulation, and on this basis Mr. Veblen explains all the characteristic vices—there are no virtues—of the leisure class. Conspicuous leisure involves not only abstention from every form of useful activity, but, in order that wealth and power may be placed in sufficient evidence, the acquisition of useless and expensive habits. Such are manners, breeding, polite usage, decorum, etc. Further refinements are vicarious leisure and vicarious waste, such as the extravagance of a rich man's wife and daughters and the idleness of his servants.

Mr. Veblen has no difficulty in showing that the canons of taste of the leisure class are wholly pecuniary. Elegant dress is *par excellence* the insignia of leisure. Women's dress is obviously designed to ensure the maximum of hindrance to their activities: the Chinese practice of foot-binding, though Mr. Veblen does not mention it, is the supreme example. The cap and gown of the University student and the cassock of the priest are expressions of the same pecuniary culture.

The characteristic occupations of the leisure class are explained as expressions of predatory emulation. Their addiction to sport is a survival of the predatory stage of culture; the gambling spirit pervades the sporting element, and shades off insensibly into the frame of mind which finds gratification in devout observances.

There is naturally no suggestion in this tale of unrelieved gloom, of any service rendered by the leisure classes, nor any indication why the community should have continued so long to tolerate their existence. The whole treatment of the subject, and even more the style in which it is written, must make it most acceptable reading to the exponents of the class war.

H. REYNARD

Les Théories Économiques et Sociales de Thorstein Veblen. By WILLIAM JAFFÉ, B.A. (Paris: Marcel Giard, 16 rue Soufflot et 12 rue Toullier. 1924. Pp. 187.)

THIS book is intended to introduce to French readers a prominent American economist whose works have so far not penetrated into the libraries of Paris. The writer gives an admirably lucid account of Veblen's main theories, and allows himself only two criticisms. The first, that the work appears entirely devoid of plan, he counters by discovering a guiding principle, a system of interpreting economic phenomena. Veblen is an uncompromising opponent of the classical political economy,

holding that classical theories are incapable of explaining modern economic tendencies, and that the marginal theory of the more modern school has not succeeded much better.

In the days of Adam Smith the small, privately-owned business was still in vogue, the master of workshop or factory supplying both the brains and the capital, and making an honest living by supplying goods at a price determined by their labour cost. To-day there is no relation between labour and cost price, which is entirely dependent on "what the Traffic will bear." Industry is so inordinately productive that it is for ever in danger of producing more than it can sell at a profit, and restriction of output becomes the manager's paramount consideration.

The subordination of industry to financial interests is thus the chief vice of the present order. The second is the control which big business has acquired over the instruments of production. In the handicraft age every artisan could own his tools and possess his soul. To-day the production of goods involves the use not only of heavy machinery but of specialised knowledge. The processes and their working are our social heritage, but they are inseparable from the instruments which have fallen into private hands, and the owner is therefore in a position to exploit the common heritage to his own advantage and to the detriment alike of wage-earner and consumer. The third vice inherent in our system is the manufacture and inflation of credit by the financier, which completes the divorce between industry and finance. The financial value of a business concern is not the sum-total of its assets, but the capitalised value of its probable yield. In general the tangible assets cover little more than the Debentures and Preference Stock of a company, while the Ordinary Stock depends for its value on the mere capacity to sell. The net result is an appalling waste, and big business grows rich while men are starved of goods.

The above is a dispassionate statement of the main theories, expounded by no means dispassionately in Veblen's writings. Mr. Jaffé pays due tribute to the merits of the work without claiming too much originality for his author's theories. "The Theory of Business Enterprise" and "Absentee Ownership" are obviously influenced both by Marx and by Sombart. Veblen's "instinct of workmanship" is clearly William James's "instinct of constructiveness" in an economic setting. The most original portion of Veblen's work is no doubt the opposition which he finds between production and finance, between the interests of the community and the methods of big business. Mr. Jaffé

neither criticises the premises on which the reasoning is based nor questions the conclusions. Nor again, beyond a casual mention of the fact that Mr. Graham Wallas dislikes Veblen's irony, does he make any reference to the concentrated venom of Veblen's writing. But the average reader needs a walk in the sun to clear his head of sulphuric acid fumes between every two volumes. A single criticism ends Mr. Jaffé's study. In spite of the ferocity with which Veblen attacks the present order, he has no remedy or constructive proposal to offer. Production should be in the hands of technicians, and a Soviet of technicians must replace the existing Soviet of Finance. But how the technicians shall be chosen, to whom they shall be responsible and how they shall be financed—of this there is no hint.

H. REYNARD

From Capitalism to Freedom. By H. W. PARKINSON. (Sydney: Workers' Trustees. 1924. Pp. 225. 5*s*.)

THIS volume, the work of an Australian writer, has features deserving commendation; the chapters on the history and evolution of Industry and on the philosophy and palliatives of Capitalism are distinctly useful. Under the heading "A Study in Marxian Economics," Marx's teaching is revived and commented upon for the purpose of its "clarification and modernisation." But, agreeing as we do with Mr. Ramsay MacDonald's declaration, that Marx's logical view of the State is "unreal, and his conceptions inadequate in relation to modern thought," we cannot regard the present attempt at rehabilitation as successful.

In our author's view Capitalism is deemed an ineffective system both in the way of producing and distributing wealth; it develops a functionless parasitic class, fosters class prejudice and class war, develops a ruling and in consequence a ruled class, and also promotes Imperialism and causes international war. The crux of the present economic problem is, "how to fix prices on real cost," and the remedy for dislocation "is to be found in Guild Socialism." And again as to "freedom," "we may—we must—expect the development by society of an economic organ, and in Trade Unions we see the embryo of such an organ." Committees will determine the policy of Industry. The performance of definite duties will be in the hands of individuals, though "team work will be possible, but will be co-ordinated." Everyone will have a voice in determining the conditions and surroundings of his work, and will be able to choose the kind of work he prefers,

the rate of pay to be fixed by "social evaluation," until "through industrial democracy economic freedom is assured." The international control of industry, "though as yet in the future, is certain of fulfilment." But if all men are to work hereafter, one may perhaps ask the question, since labour is exerted on different planes, what measure of the intensity, duration, and efficiency of labour will ultimately be insisted upon? Is it any reply to point out, generally, as we may, that Australia claims to have increased its private wealth from pre-war £325 per head to £400 per head of population in 1921.

Mr. Parkinson regards State railways, municipal services, etc., as examples of "a spurious Socialism." Thus the typical State railways of Australia "are nationalised, but they are not socialised, and they are certainly not owned by the people of Australia, who, in fact, only hold the equity of redemption. They belong—except nominally—to the British capitalists who advanced the money which enabled the railways to be built." We may ask, however, where and how British capitalists have any control over the management and returns of the State's railways. As Mr. G. D. H. Cole admits, Trade Unionism exists to carry on the class struggle, and "if industrial democracy is the end in view, Labour has a long way to go, and must set its own house in order before it can hope for any great success." We cannot help regarding as still doubtful the author's conclusions that Australia has a legislature ready to enact communal ownership, that capitalists are mere creatures of circumstances, for whom it is only right and fair that the "revolution" should be made as easy as possible.

A. Duckworth

Wages and Profit-sharing, with a chapter on Indian Conditions. By R. N. Gilchrist, M.A., Labour Intelligence Officer, Bengal. (University of Calcutta. Pp. 422.)

Part I of this book reviews various methods of industrial remuneration. The case for and against the Time Wage, the Piece Work Wage, the Premium Bonus, Scientific Management and other systems of payment are fairly stated.

Part II gives a useful account of many Profit-sharing and Co-partnership schemes, coupled with a reasoned statement of the difficulties which accompany this method of advance towards the solution of industrial problems. Profit-sharing and Co-partnership are, we are told, the "outward and visible signs of the yearnings of capital and labour to find peace and good-will."

Part II is perhaps the most interesting and useful section of the book, dealing as it does with the general conditions of labour in India. It shows how different the problem is as between the East and West, and illustrates the danger of assuming that things called by the same name mean the same thing. A Trade Union in India is at present a very different thing from what it is here. The officials of the Unions do not correspond with the responsible heads of British Unions. They are often, it would appear, mere adventurers, here to-day and gone to-morrow. The reasons often given for striking, the average workman in Great Britain would laugh at. To students not acquainted with industrial conditions in India, this section of the book should be very helpful.

HENRY VIVIAN

Sharing Management with Workers. By BEN M. SELEKMAN, Department of Industrial Studies of Russell Sage Foundation. (New York. 1924. Pp. 141. $1.50.)

THIS is a study of the partnership plan of the Dutchess Bleachery Works, Wappingers Falls, New York, and describes how step by step a scheme for enabling the workers to participate in the management and profits of the enterprise has been developed since 1918.

It is one of the largest mills of its kind in the country, and employs about 600 workers, 450 being men and 150 women. A considerable proportion are Italians. The workers now share in the conduct of the business through three Boards—the Board of Operatives, the Board of Management and the Board of Directors. They share in the financial results through the net profits of the Company being equally divided between stockholders and operatives. Net profits are arrived at after meeting the operating and other costs, the payment of the market rate of wages and 6 per cent. to stockholders. Two Sinking Funds are created prior to the division of profits, one to assure the income of the stockholders, the other to assure half-time wages for the operatives during periods of unemployment and business depression. The plan was not put forward as a substitute for Trade Unionism, and in practice friction with the local branch of the United Textile Workers has been avoided. The Company say that "there has been no question about the response of the workers to any reasonable demand made by the management to increase the efficiency of the industry."

HENRY VIVIAN

Quelques considérations au sujet de la construction des nombres indices des prix et des questions analogues. By C. GINI (in *Metron*, Vol. IV., No. 1).

PROFESSOR GINI starts so many hares in this study, which occupies the greater part of the issue of *Metron* of August 1924, that it is a matter of great difficulty to know which he is following in particular passages, a difficulty which is enhanced by the absence of any clear scheme of cross-reference, and by the use of the same symbol A′ for two quite different formulæ on pp. 56 and 84. These obscurities account for the delay in noticing what is in some respects an important contribution to the study of the fundamental conception of index-numbers of prices.

Perhaps the clearest statement of the problem which Professor Gini sets out to solve is given on p. 95, of which a free translation is as follows: "The object of the inquiry is to determine how a certain magnitude, whose variations depend on two groups of circumstances, would have varied from one given year to another, if only one group had varied, by isolating directly the variation determined by this group and indirectly that determined by the other group." This is called the method of elimination. The two groups in the principal study are prices of commodities and quantities of commodities. The magnitude whose variation is to be determined is the inverse of the purchasing power of money. Especially in the earlier part of the study the method of elimination is treated so as to include other magnitudes depending on other groups; for example, the death-rate of a community which depends on age distribution and on death-rates at special ages. To a certain extent it is illuminating to be shown that the same algebraic formulæ can be used to express so many diverse conceptions; but the method obscures the main problem, in which (as the author abundantly proves) the idea of the marginal utility of money and the effect of a change in the quantity of money in circulation are involved, while there is nothing closely analogous to these in the other measurements discussed.

It is recognised that some purposes for which price indices are constructed do not involve the isolation of variations in quantities and therefore do not fall within "the domain of the methods of elimination," but "these are less frequent and less important than many authors think" (p. 26). In this connection he criticises the use of an unweighted index for M. March's "index monétaire." Though at any one date the marginal

utility of money may be assumed to be the same in respect of all commodities, yet it cannot be supposed that its change from one date to another is the same in respect of all commodities; consequently the nature of the variation ought to be considered, and it is not reasonable to expect the variations of marginal utility to be eliminated if they are correlated with the quantities purchased. In fact it ought not to be assumed that an increase of the currency in circulation affects all prices equally or with such inequalities as are eliminated by a process of averaging.

Some system of weighting is therefore necessary. But a system of fixed weights, applied to two years or a succession of years, "implies an absurdity. It would be absurd in principle to find out what a total of values would become if the prices only varied, while the quantities remained constant" (p. 80), when, in fact, the prices influence the quantities and the quantities influence the prices. Surely at this point we should have expected that Professor Gini would have put aside the elaborate analysis (pp. 21 to 80) of index-numbers with fixed weights; instead of doing so, he pursues it further, and finds other causes of failure to arrive at an ideal solution.

In this pursuit, which is developed in pp. 81 to 134, a number of conditions are laid down that should be fulfilled by an index-number of prices as defined above in "the object of the inquiry." On p. 97 we find (i) that Paasche's and Laspeyre's formulæ ought to give the same results, (ii) that the index should be reversible between one year and another, (iii) that the change from one year to another should be obtainable by two steps, depending respectively on a change of prices and on a change of quantities. On p. 107 (ii) is modified so that the change from year (*a*) to year (*c*) is the reciprocal of the combined changes from year (*c*) to year (*b*) and year (*b*) to year (*a*); "condition circulaire" (iii) is modified also so as to give a "condition de la décomposition graduelle des causes," and (iv) is added so that the measurement of year (*c*) relative to (*a*) is the product of the measurements of (*c*) relative to (*b*) and (*b*) to (*a*)—"condition transitive." These conditions are numbered differently on pp. 105–6 and two others are added, called the condition of "permanence des totaux" and the condition of "invertibilité." None of the formulæ examined satisfy all these conditions. Professor Irving Fisher's "Ideal Index-number" is commended, but not principally on the grounds on which it is established in *The Making of Index-Numbers* (p. 104). On the whole Professor Gini seems to prefer a development of the "Ideal Index-number," by which it is

formed separately for several pairs of years and the geometric mean of the results taken. This satisfies at least the conditions "transitive," "circulaire," "reversibilité" and (iv) modified. It is, however, very laborious to compute, and one may add that the data for it are in practice unattainable.

In this formula we have passed from the method of fixed weights, to which our author appeared to intend to confine himself on p. 85, but we have not obtained a formula which is applicable to the case where the quantities are necessarily connected with the prices.

On p. 139 Professor Gini returns to the consideration of the change in the marginal utility of money. His analysis is inconclusive and no clear means of measurement is given, but it is suggested that the weighted average, in which the quantities of goods consumed in the second year in question are the weights, is preferable to an unweighted average. Earlier in the book he seems to regard this measurement, and the companion one in which the quantities in the first year are used as weights, as limits within which the true measurement lies.

This searching analysis then leads to quite inconclusive results. Even if the purpose of an index-number had been clearly defined, it would appear that the relevant facts cannot be known, and that no single formula can be devised that satisfies all the conditions that appear reasonable. It seems necessary, therefore, to follow the line of attack that Professor Gini and Professor Irving Fisher neglect, namely, that in which the precision of the estimates is examined by the theory of probability, and in which dependence is placed on the elimination of variations. The essential difficulty on this line is the disturbing effect of correlation between the changes of price and the changes in quantity. This difficulty Professor Gini appears frequently to consider, but turns away before it is surmounted.

It is more than possible that the author's treatment has been misinterpreted in this review, for the resaons stated at its commencement. If so, apologies are due to him, and it is to be hoped that he will take some opportunity of expressing his main conclusions concisely and in a form that cannot be misunderstood.

A. L. Bowley

Das Geldproblem in Mitteleuropa. By DR. ELEMÉR HANTOS, former State-Secretary for Commerce in Hungary. 1925. (Jena: G. Fischer. Pp. 162 in great octavo, with one table.)

PROF. HANTOS is convinced that the many unnatural frontiers in present-day Europe must be neutralised by agreements for the regulation of commerce, traffic and currency. His present volume is an enlarged edition of a memorandum drawn up by him to the Economic Committee of the League of Nations, and deals with the development of the European currencies since 1914, the actual monetary problems of the Central European States and a forecast of the future.

In four chapters Prof. Hantos describes the inflation in Germany, Poland, Austria and Hungary. On Germany a policy of inflation was forced first by the policy of compliance, then by that of passive resistance against the constant menaces and pressures of France. The only limit to the pace was set by the complete derangement of German economic life. The currency troubles of Poland can be traced back to budget difficulties. For many years Poland gave the impression of an economically very badly administered State. Inflation in Austria was not due to any external political cause and was not only provoked by the State alone, but by the passivity of all its public and private enterprises. In Hungary inflation has prevailed longest and has presented itself in most varied forms. Nevertheless it has been less intensive than in its neighbour States and never reached their catastrophic conditions. The private claims surpassed there those of the State.

A large part of the book is devoted to currency reconstruction. The author recognises the conscientious and energetic action of the Czech Government in the matter of the rate of exchanges. In Germany a currency organisation was created, which in its construction and activity bears the stamp of an economically and politically defeated country. Stabilisation and currency reform in Austria became an example which was followed elsewhere, and especially in Hungary. Concerning this last country, the author can state with satisfaction that his idea of the equalisation of the Austrian and the Hungarian crown was carried out through an agreement made between the Bank of England and the National Bank of Hungary. The new Polish currency system, as well as those of Yugo-Slavia and of Roumania, form the subjects of some critical considerations.

Setting forth the fundamental principles of currency reconstruction in Central Europe, Hantos points out the measures which in the various Bank Acts aim at the prevention of a new inflation, and adds that the Note Banks in Germany, in Austria and in Hungary will be the central organs of the financial sanation of these States.

Considering the problem of new gold standards in the Central European States, he asserts that the systems proposed by Fisher and Keynes, which aim at a more perfect solution of the problem by leaving the gold standard behind, are in the present state of finances impracticable. The shortcomings of the Index system led elsewhere to the rejection of similar attempts. The weaknesses of this system would be fully understood in Hungary, where for the sake of currency stabilisation the introduction of a reckoning unit based on index figures has been attempted in the form of a "saving-crown" standard.

In these times very few States can afford the introduction of a real gold standard. Therefore the future currency of Central Europe can only be a standard with a "gold nucleus," which will be fit to regulate the circulation with a suitable reserve of foreign gold currencies. Already various forms of such currencies with a gold nucleus are realised in different countries of Central Europe.

But as territorial units the Successor States of the late Austro-Hungarian Monarchy are too narrow, too incapable of self-support, and their institutions too lacking in traditions to maintain durably separate currencies. The foundation of a currency-convention by those six Successor States is therefore the only way leading to a satisfactory end. Such a convention would give the currency a basis of one million square kilometres with a population of 90 millions, and secure it a territory extending far beyond the boundaries of the late Monarchy, including the major part of Central Europe. A currency-union would not require any common Bank-of-issues. The author recommends a system consisting of a trust of Banks-of-issue, leaving quite untouched their separate economic policy, their separate discount policy and their separate foreign-currency policy. One single organ would be necessary to control the management of the Banks, such as at present is represented in Austria and in Hungary by the Financial Commission of the League of the Nations. The duties of this Organ of Control could be undertaken for entire Central and Eastern Europe by the Bank of England.

In reality such a pure and simple currency-union has hitherto

never existed. In Central Europe, however, the question is just how States, independent politically, but dependent economically, can be united in a currency organisation assuring their full political sovereignty without developing an economic subserviency.

Instead of a Convention of all the Banks-of-issue according to the scheme of the Genoa Conference, which would signify the delay of the reconstruction of Europe to a very late date, the author recommends the union of the Banks-of-issue of Central Europe. Such a union would suppose the stability of the different national currencies and the adoption of a common standard. This stability was attained in 1924 throughout Central Europe, except in Yugo-Slavia and in Roumania. With regard to the common standard, the author puts a plan which coincides with the decimal system of gold.

In an Appendix the reader will find highly instructive statistical data throwing light on all the economic problems connected with currency; the circulation of banknotes, the rise of prices, over-industrialisation and over-capitalisation of the various Central European States are clearly set forth.

EUGENE SCHWIEDLAND

Principles of Foreign Trade. By G. E. GRIFFIN, Ph.D. (New York: The Macmillan Co. Pp. 348.)

Domestic and Foreign Exchange, Theory and Practice. By IRA B. CROSS, Ph.D. (New York: The Macmillan Co. Pp. 572.)

A Neglected Point in Connection with Crises. By N. JOHANNSEN. (New York: The Bankers' Publishing Co. 1908. Pp. 194.)

DR. GRIFFIN'S book is mainly descriptive of the machinery of foreign trade, but includes a clear account of the fundamental principles of the theory. There is nothing novel in the theoretical discussion, but the author may be commended for clearness and simplicity of exposition. Like all expounders of the elementary theory, he has to take a hypothetical case of two nations, in his case usually the United States and Japan, and he works out arithmetical illustrations. He assumes as a rule the gold standard and he has not much to say about inconvertible paper currencies.

On page 26 there is a passage which is ambiguously phrased: "It appears, therefore, that, under the assumed conditions of two countries trading exclusively with one another in two products, two conclusions are justified; first, the products will come to exchange for the one for the other without the necessity

of a movement of gold; . . ." A reader who had not studied the preceding pages would suppose this to mean that the process of price adjustments leading to exchange would take place without necessarily any movement of gold. That, however, is clearly not what is meant; the author means to say that when the necessary price adjustments have taken place in consequence of the movements of gold, exchange will then continue without further movements of gold.

The discussion of Free Trade and Protection is on the orthodox economic lines. The author does not, however, go into all the difficulties. He would not satisfy people who start with the supposition that a substantial amount of unemployment is the normal rather than an exceptional state of things. He also does not consider whether an improvement in the terms of exchange on which non-protected imports are obtained, which may result from a restriction due to a tariff on some imports, may offset loss due to less economic use of labour in the protected industries, although he has clearly explained that the advantage of foreign trade lies in the diminished labour cost of imports. That question, however, would perhaps be beyond the scope of a book which is simply expounding the more elementary principles.

Dr. Ira Cross's book, to a large extent, covers the same ground as the preceding, but considerable attention is devoted to the machinery of domestic exchange in the United States, and the details of foreign exchange are dealt with more elaborately. The book is of interest more particularly to those who are engaged, or likely to be engaged, in practical banking, and is intended especially for American readers.

The reader will find a very full discussion of the relation between the rates for long and short bills, as affected by differences in the discount rates in two countries. There is also a long chapter dealing with exchange relations between the United States and silver, gold exchange and paper currency countries, and a narrative of the exchange and gold movements as affecting particularly the United States from the outbreak of the war.

There are reproductions of numerous forms connected with both domestic and foreign exchanges, and many charts showing the fluctuations of rates of exchange, both pre-war and during and since the war. The book is certainly a great compendium of detailed information and should be useful for reference.

Mr. Johannsen's work is specially concerned with the question

what happens to savings during a period of depression. It is always difficult to say, so long after the book was written, how far the author contributes anything new to the study of the causes of business fluctuations. Even if it were published now for the first time, however, the author would have some justification for saying that this particular point has not been quite adequately dealt with.

To put it briefly, his main thesis is that whereas in times of good trade saving is mainly for the purpose of creating new wealth, in times of depression it mainly results in mere transfer of wealth to those who are in a position to save from those who are forced to sell property of all kinds at a sacrifice. There is doubtless a substantial amount of truth in this and it is important that it should be recognised. It is not so clear, however, that this fact is in any way a cause or explanation of the occurrence of depressions. Depressions do not occur because of a change of intention on the part of people who have savings. The causation is rather the other way round, and it is because a depression has set in, with a fall of prices, that there is little attraction in starting new enterprises, and at the same time opportunity for acquiring existing property on favourable terms for the new owners.

The author recognises that in times of depression the amount of money saved and seeking investment is diminished, but he says that it is not diminished to the same extent as the growth of new wealth is diminished. It might be argued, on the other hand, that if A saves £10,000, and B is forced to sacrifice £5,000 worth of goods in order to meet losses, the amount of saving for the community is only £5,000—in other words, the total real saving of the community is cut down by much more than the apparent amount.

It is certainly desirable that more study should be made of the extent to which the real aggregate of community saving is diminished by the extent to which it becomes merely a process of transfer from one set of people to another, and the author is entitled to credit for emphasising this phenomenon, even if one doubts the utility of the diagrammatic pictures by which the argument is illustrated.

C. F. BICKERDIKE

The National Bank of Greece: a History of the Financial and Economic Evolution of Greece. By M. EULAMBIO. (Athens: Vlasto. Pp. xvi + 210.)

THE late John Valaority, the Chief Greek authority on monetary matters, has left a standard History of the National Bank of Greece, an institution with which he was connected all his life and of which he died a Governor. But Valaority's exhaustive work, published in 1902, stops naturally with the beginning of this century, and he excluded from the field of his study events anterior to the foundation of the Bank (1841).

It was his intention to write another essay on the attempts which were made from 1829 to 1841 to create a National Bank. Such a work is now facilitated by the publication of the correspondence between the two men to which the new institution is mainly due,[1] George Stavros (the Greek William Paterson) and John Eynard, a great philhellenic banker of Geneva.[2]

As for the years 1902–1923, they have now been most successfully dealt with by M. Michel Eulambio, one of the managers of the National Bank, in a work published in Athens but *written in English.* This alone would constitute a claim for this book to be reviewed in the ECONOMIC JOURNAL. But it has many others. Besides giving a full account of the Bank's activities, it forms a very complete and thoroughly readable economic history of Greece during the war. Its chapters on currency, on the much-talked-of but little known forced loan of 1922, and on food supply during the war will no doubt attract the attention both of the theoretical and practical economist, even if he is not peculiarly interested in Greece.

M. Eulambio, who has been for many years a contributor to the *Economist* of London, writes with great clearness, and as he has tackled personally all the problems he deals with, he always conveys first-hand and often otherwise unattainable information.

Statistical tables and diagrams on Greek population, foreign trade, public revenue and expenditure, foreign exchange, circulation, index-numbers and prices of Greek bonds from 1898–1924 add greatly to the usefulness of this singularly interesting work.

University of Athens. A. ANDRÉADÈS

[1] Vide *Letters from Eynard to Stavros,* 1841–3, edited by the National Bank of Greece (Athens, 1923).

[2] M. Chapuizat, the well-known Swiss historian, has published under the title, *La régénérescence de la Grèce,* another series of Eynard's letters relating mainly to the same period (Paris, 1924).

The Economic Laws of Art Production. By SIR HUBERT LLEWELLYN SMITH. (London: Oxford University Press. 1924. Pp. 246.)

THIS "essay towards the construction of a missing chapter of Economics" might be placed among the revenges, or redresses, brought in ironical destiny by the whirligig of time. Ruskin gave high "value" among his writings to *Unto this Last*, and, while the bitter rhetoric of those eloquent discourses furnished the economist with apposite material for cool re-consideration, and dealt some resounding home-thrusts on his armour, he might nevertheless connect the perverse misunderstanding and wilful caprice which were also displayed with the incursion of a famous expert on imaginative art or an admired exponent of sublime ethics into a terrestrial prosaic region where "angels might fear to tread." In the discreet balanced brochure before us now the process is reversed, but the appropriate *caveat* is supplied. A similar *succès d'estime* may not be won, as probably it has not been sought, by the later author, who has, it is clear, punctiliously informed himself in both departments of which he treats; for attack is more popular than defence, and dogmatic unreserved pronouncement is here properly replaced by tentative provisional discrimination. Yet, within limits prudently recognised, a shrewd endeavour has been made, successfully, to show how conceptions and reasoning which are generally known to trained readers of Economics can, or should, be applied to art production. Some illuminating *aperçus* are opened, and practical suggestions, which, we may fairly hope, will yield ripe fruit, are offered. The essay is as stimulating as it is the outcome of profound and studied thought.

The Chairman of the British Institute of Industrial Art is, we have hinted, as well-advised in what he does not as in what he does attempt. A "working definition" of a work of art as a "product of human labour, exhibiting unity of conception, fulfilling a useful function by means well suited both to its purpose and to the means of its production and possessing the quality of beauty," avoids indeed confessedly the "basic questions" of the "nature of utility" and the "nature of beauty." But it permits of the satisfying luminous treatment of what may be regarded as the dominant problem springing from the most conspicuous development of economic organisation. How unity of design is to be reconciled with execution under a system of division, and subdivision, of labour, and of what appears the

inevitable trend in industry to "standardised mass-production," engages most of our author's thought and statement, and his conclusions on the practicable means of seeking and securing harmony by "strengthening" the "workshop designing staff," "so as to be capable of original art-creation as distinct from adaptation," are as sensible as they are pertinent. Our space will not allow us here to refer in detail to other arguments and observations, which, no less surely based on the known history of the past, are firmly brought into relation with the actual circumstances of the concrete present, but we would remark on the deft care with which such notions as the cyclical fluctuations of trade are fitted to art production, and on the wise insight which lays stress on the modest possibility of the humbler plan of establishing a "firm basic tradition of common art" as contrasted with the vaulting ambition of "making a short cut" by "directly imitating the work created in past periods" of outstanding fame. It may perhaps be added appropriately that the dawn of great art epochs, lying, as Sir Hubert Llewellyn Smith suggests, "on the knees of the gods," is not, as we judge, harder to explain than the continued spurt, for instance, of industrial discovery in England in the later eighteenth and the earlier nineteenth centuries. The analogy may instruct, like others handled in this little book, which, we venture to declare, is provocative in the best sense of the term.

L. L. Price

Protection of Indian Steel. By F. E. Solomon, M.A., Cantab. (University of Calcutta. 1924. Pp. 103.)

The writer convinced himself of the expediency of granting protection to the steel industry of India after a careful examination of available data, including the evidence produced by the Tata Iron and Steel Company before the Tariff Board. This and a group of connected companies are the only concerns which profit by the enhancement of the duties on imported steel made in June 1924. There are projects for the starting of other companies, but none of them will be producing steel within the three years for which the protective duties have in the first instance been imposed. It is important to notice that the Tata Company can in no case supply the requirements of India within that period. Professor Solomon puts them at 1,100,000 tons of steel yearly, but the figure may be reduced to between 900,000 and 1,000,000. The Company was founded in 1907, and ten

years later it had an out-turn of 124,000 tons of steel. It claimed that owing to large extensions it will be able in 1925–26 to produce 420,000 tons, or less than half the demand. That being so, there need be no difficulty in deciding the question of high or marginal protection in favour of the company.

The Company did well during the war and the boom which followed. Acute trouble did not begin till 1921–22, when the dividend fell to 4 per cent. in a country in which 10 per cent. is required to attract capital. In 1922–23 the business had ceased to earn any profit. After the Tariff Commission had reported in favour of "discriminating protection," the first application presented to the Tariff Board was that of the Tata Company.

In some important products the Company claims, probably with justice, that it can produce steel up to the British standard. It commands abundant supplies of ore, coal, and limestone, though the last two are not of the best quality. But labour is extremely inefficient and the foreign supervising staff is very expensive. Efforts made to train the workers and educate Indians for the task of superintendence have met with scant success. In fact the figures on p. 26 indicate an extraordinary falling off in the output per man, notwithstanding a moderate increase of wages. At present the ordinary Indian workman is without ambition and content with a low standard of subsistence. He only cares to work enough to earn what suffices to procure his very modest requirements. Sea transport being so much cheaper than transport by rail, home production has in a vast country like India, with its chief industries in or near ports, far less advantage than might at first sight be expected.

The Company told the Tariff Board that the lowest price which would yield a profit was Rs. 173 a ton. Writing in the spring of 1924, Professor Solomon gave his reasons for thinking that the figure might be reduced to Rs. 160 in 1924–25 and Rs. 152 in 1925–26, when the full effect of recent extensions should become apparent. This estimate largely depended on the assumptions that the output of 1925–26 would be treble that of 1922–23 and that labour would become more efficient. It appears that for reasons explained by the writer the Company had in the earlier year recruited a larger staff than was actually required for the work in hand. Professor Solomon takes Rs. 135 as the minimum price for English steel landed in Bombay, apart from the duty of 10 per cent. leviable when he wrote. He put the figure for Belgian steel Rs. 15 lower. To enable Tata to compete on favourable terms he proposed to raise the 10 per cent.

duty to 15 per cent. in the case of British, and 25 per cent. in that of Belgian steel, and to levy the duties on a tariff valuation based on the cost of English steel. Further, for the year 1924-25 he suggested the payment in addition of a bounty of Rs. 10 per ton.

It may be as well to bring the history up to date. The Tariff Board founded its recommendations on the comparative cost of British and Indian steel, putting that of the latter at a considerably higher figure than the writer contemplated. Hence the protection granted in 1924 by enhancement of duty was greater than he thought necessary. Nevertheless, a few months later the Company was clamouring for further help on the ground that its output was being undersold by cheap Belgian steel. The ordinary shares, which were selling at Rs. 25 before the duty was enhanced, fell to Rs. 12 in or before last December. Apparently the amount paid up on them is Rs. 75. The Government has strong reasons, including recognition of the work done during the war, for adopting measures to keep the Tata Company alive. With the assent of the Legislature, it has just granted a bounty of Rs. 20 for the twelve months ending 30th September, 1925, payable on 70 per cent. of the weight of steel ingots produced. Nobody probably believes that, if the industry is to continue, the bounty will cease in September.

It may be that there are a few industries in India which ought to be protected. But it is difficult to share the writer's confidence that the steel industry is now ripe for it, or will be till labour is less inefficient, or to feel sure that the price paid for it is not too heavy. Protection is only justifiable on the assumption that the period during which that price is paid is not indefinitely prolonged. Duties will raise the cost of State Railways and Canals, and be a burden on the whole community, which will pay either in high prices or, in case of a bounty, in taxation. The writer admits that no country which has adopted protection has given it up. But he pins his faith on an undemocratic government and the "Indian politician," who between them will resist pressure and protect "the silent masses." It is hard to share his belief. The Indian politician is a determined protectionist and already there are complaints of lobbying. An Assembly in which the agricultural masses were adequately represented would be far more likely to oppose undue protection than the present Legislature. J. M. DOUIE

Unemployment Among Boys. By W. McG. Eager and H. A. Secretan, with an Introduction by the Rt. Hon. H. A. L. Fisher, M.P. (London: J. M. Dent & Sons, Ltd. 1925. Pp. xii + 164. Price 2*s*. 6*d*. net.)

This book treats its subject so well and clearly as to make one wish that the authors had had the opportunity to deal with their problem on a wider scale. Nevertheless there is much to be said at this stage for the shorter treatment. The problem is in many ways a new one, though the authors take too extreme a view in suggesting, as they appear to do (p. 1), that it is definitely a post-war product. But it is at any rate new in the sense that only now is its existence being clearly realised, whilst it has enormously increased in dimensions. Consequently a book which describes the problem briefly, and yet with a grasp of its intricacies, as this does, is likely to be valuable.

The authors have adopted the method of examining intensively a limited area in Bermondsey, with which both of them are well acquainted. This has the advantage of allowing a thorough treatment in a short space; but has certain disadvantages. Thus the district may present a picture that differs from that of London as a whole, as that in its turn may from the rest of the country. The authors are fully aware of this, and after careful examination incline to the opinion that on the average conditions are worse in their area than in the whole of Bermondsey and in London generally. They also emphasise the need of caution in applying conclusions drawn from a small number of cases.

The study of the problem is seriously hampered by lack of statistics. The Live Register of the Employment Exchanges is incomplete even for boys over sixteen, who are eligible for unemployment benefit, and still more for younger boys. The real total in London is put at about 100 per cent. higher by the authors, and as much as 200 per cent. by Sir Reginald Blair. The authors' examination of the figures is most interesting, and is supplemented by an attempt to estimate the actual loss in time, its distribution between different ages, and the influence of special physical and mental conditions, such as " the high percentage (in Bermondsey) of really diminutive boys, whose development has been delayed by the cramped quarters and irregular feeding of a casual labourer's home " (p. 55). The effects of unemployment on both the character and outlook of the boys are well and clearly indicated, and the connection of the three forces of " over-employment, misemployment and unemployment " is steadily kept in view.

One interesting point is that the difficulties are less serious once a boy has started work, than for those who have difficulty in finding it when they leave school. "Once a boy has been in work, he will find it less difficult, even after an interval of unemployment, to re-adapt himself" (p. 40). The growth of unemployment, too, has led to a deterioration in the character of boys' jobs. Boys formerly were to some extent protected by the shortage of boy labour; but "this factor is no longer operative, as the harsher and baser forces in industry are well aware" (p. 48).

In contrast with this, the authors speak highly of the work of the official agencies, from the Ministry of Labour downward. Their efforts are sympathetically delineated, whilst full emphasis is laid on the almost impossible conditions under which they have often worked. In particular, attention is drawn to the difficulties due to necessarily hurried and improvised arrangements, and to the bad effects on the boys of the controversies, such as that between the Ministry of Labour and the L.C.C. over the Juvenile Unemployment Centres. "He (the boy) is not long in concluding that he is being played with, that the country grudges him his unemployment benefit and merely desires to make drawing it irksome" (p. 97).

The authors' remedies include the extension of Unemployment Insurance to the age of fourteen, and they deal effectively with the arguments against this course. They advocate giving entire control of the placing of boys to the Education Department. Here, however, they perhaps over-estimate the general capacities of Local Education Authorities; and some of the information contained in their book seems to show the Ministry of Labour organisations in a too favourable light. They argue that the eight hours a week continued education of the Fisher Act is inadequate for the boys and in many ways inconvenient to the employers, and suggest a maximum week of forty-eight hours, of which not less than fourteen shall be spent in school. The whole book deserves most careful study, and one may conclude with the hope that the authors will follow it up with a wider and fuller treatment.

N. B. DEARLE

Malthus and his Work. By JAMES BONAR. Second Edition. (London: Allen and Unwin. 1924. Pp. x + 438. Price 12*s.* 6*d.*)

THIS is the second edition of a book which has now for many years deservedly been the standard work on Malthus. The first

edition was published in 1885, and it has never been reviewed in the JOURNAL, the first volume of which did not appear till 1891. The changes made in the present edition are very slight, and there are but few additions. Some obvious mistakes have been corrected, and short notes of no great importance have been added to six of the chapters. The biography of Malthus, to which Book V is devoted, has been expanded, but even now it only occupies some thirty-five pages. However, the letters of Ricardo to Malthus, to MacCulloch, and to Trower, together with Hollander's *Life of Ricardo*—which have all appeared since the first edition of Dr. Bonar's book—have been made use of, and we have now a fairly adequate life of Malthus, which after all, apart from his work as an economist, was somewhat uneventful.

The book, as Dr. Bonar says, was never intended to be a treatise on population, otherwise it would have had to be completely rewritten. This is no doubt true, but we should nevertheless have liked to have Dr. Bonar's views as to the application of the teaching of Malthus to the population question at the present time and to the controversy which has arisen since the war. As the book is more than a reprint—which is apparent from the additions which it has been possible to make to the biography—it is regrettable that it could not have been brought rather more up to date in some respects. For instance, Book II, chapter i, contains a good account of Malthus' position with regard to the theory of rent as compared with that of Ricardo. But the author's criticisms of both, made in 1885, are somewhat out of date, there being of course no mention of the later developments of the theory by Marshall and other later writers. Again, had the book been brought more up to date, Dr. Bonar would have avoided having to speak of " the present century " when he means the nineteenth, and of " recent observers " when by " recent " he means 1883. And he would hardly now say that " free trade is no longer among our problems."

The book as it stands, however, is still one which no student of Malthus and the economic theories of the early nineteenth century can afford to neglect. It contains a very detailed description of the *Essay on Population*, and a careful account and explanation of the changes made in later editions. But although by patient study it is quite possible for the student to obtain a clear idea of the theory of population as propounded by Malthus, a concise summary of his views in their most complete shape would have been a useful addition. Book II, entitled " Economics," deals with the *Political Economy* and the other

economic writings of Malthus, which are less well known than the *Essay on Population*. Book III is a statement of the moral, political, and philosophical views held by Malthus, and Book IV, entitled "The Critics," contains a good classification of the critics of Malthus and their various points of view.

The book contains a vast amount of information, and although the subject is not one which lends itself readily to humour, it is in places quite entertaining. MacCulloch is neatly described as "a writer who discovered absolute truth at a very early age," and there is a pleasant human touch in the fact that the author of the *Essay* was familiarly known to his students at Haileybury as "Pop Malthus." The book certainly entirely dispels the ideas which were current in Malthus' own lifetime, and have been current since his death, as to his inhumanity and lack of sympathy with the working people. He at any rate compares very favourably with Paley in this respect. When giving evidence before the Emigration Committee of 1827, Malthus was asked if he thought it fitting that labour should be kept permanently in a state bordering on distress, to avoid the injury that might accrue to the national wealth from diminishing the rate of profit. He answered: "I should say, by no means fitting; I consider the labouring classes as forming the largest part of the nation, and therefore that their general condition is the most important of all." Again, in the *Political Economy* he writes: "I have always thought and felt that many among the labouring classes in this country work too hard for their health, happiness, and intellectual improvement." In another place, in writing of a high standard of comfort, he declares that "it is the diffusion of luxury among the mass of the people, and not the excess of it in a few" that seems to be advantageous, both for national wealth and national happiness. Paley's ideal of national prosperity was something quite different: "A laborious frugal people ministering to the demands of an opulent luxurious nation."

Dr. Bonar thinks there are signs that the twentieth century will give Malthus a fair hearing, and his wish is that his book may lead students to the *Essay* itself. This new edition has appeared at an opportune moment, and we much hope that his wish may be realised. H. SANDERSON FURNISS

Il Problema della Populazione. FILIPPO VIRGILII. (Vallardi, Milan. 1924. Pp. 600.)

THE Siena Professor is well known as a statistician. His handbook *Statistica*, 1891, has passed through many editions;

and his *Introduction to Mathematical Economics*, 1899 (written with C. Garibaldi) was described by Prof. Edgeworth in this JOURNAL (1899, p. 560) as perhaps "the most serviceable" on the subject, a magnanimous judgment, since the authors had set their reviewer down as "disputatious" (*ibid.*). His book on Co-operation was reviewed by Mr. Lionel Gordon Smith in this JOURNAL (Dec. 1924, 614–7).

The present book is not solely statistical; it goes faithfully over the whole ground of theory, ancient, medieval, and modern. Treating the Essay of Malthus as "a milestone in the history of human thought" (p. 5), knowing that author's text thoroughly, and wide-awake to the common fallacies of opponents, he is still critical and discriminating, especially when he deals with our own times and the lesson of Malthus for them. The third chapter of this book, pp. 156–180, on Methodology, has especial interest in view of recent discussions. The mathematician in the author breaks loose, and he discusses *con amore* the famous arithmetical and geometrical progressions (justifying them as "a first approximation," p. 177), then the amendments of Messedaglia, Pareto, Quetelet, Guillard, Bertillon; in later chapters Courcelle Seneuil (p. 246), Cauderlier (p. 281), Metchnikoff (p. 372), Rümelin (p. 454). He does not even omit (p. 451) the formula for intercensal population, taken by Malthus from Bridge's *Algebra*. The latest "methodology" of Prof. Udny Yule and Prof. Raymond Pearl seems not yet known to him, though there is a reference to Mr. E. M. East's *Mankind at the Cross-roads* (p. 599). There is a good description of the influence of the Essay of Malthus on Darwin and through Darwin on all biology (Chap. IV., 202–221). The writer mentions the Eugenists without saying much on Eugenics (pp. 287, 595); but he has a firm hold of the distinction between a quantitative and a qualitative progress, and has read Mr. Carr Saunders (p. 597) and Mr. S. J. Holmes (p. 596). He dares to be old-fashioned in his antipathy to neo-Malthusianism. The decline of births in Australia was, he thought, due to old Malthusianism, the retardation of marriage, not to "la deformazione neo-Malthusiana" (p. 483). Perhaps he is too confident here.

His own solution seems to be that of Berthelot (1894)—the indefinite increase of food opened out to us by synthetic chemistry, and the extraction of nitrogen from the air (p. 577, *cf.* pp. 547, 551). Yet he had quoted the ejaculation of Thiers: "Man brings his fertility with him; wherever he appears, vegetation bursts out and grain flourishes" (p. 513), only to dub it "ignorance of

agriculture." Professor Virgilii wrote on "The Agricultural Problem and the Social Future" in 1895.

Man does not live by bread alone, and in view of the far future we need to consider all the elements in our standard of living set down in Prof. Pearl's long list (*Population Problem*, 1922). Perhaps we shall be told that coal and iron, cotton, and all creature comforts other than food, will one day be produced, like food, by the magical wand of science; and there may be found some way of evading the difficulty of space.

Our author is not always inclined to a rosy view of difficulties. His chapter (tenth) on "The Demographic Disturbances of the World War" (pp. 552–574) is hardly cheerful, whether he is dealing with his own country or others. He quotes with hesitation the aspiration of some Italian emigrants, a wish father to the thought, that Italians may become a political power in the United States (p. 567). He thinks that the evil ambitions of the Germans had more to do with the war than any pressure of population (pp. 570, 571). If his language about the Teuton has not the dignified calmness now observed in English comments, some allowance must be made for men who have seen the Mede not only at their gate but within it. He seems to believe that Macaulay's old prophecy (1857) may yet become true—that the United States will one day be as densely peopled as England and suffer the same extremities, or worse, from its distressed multitudes (p. 585). Many of us will think it neither more nor less credible than the forecast of the New Zealander on London Bridge. There is more novelty in the following passage: "As the Suez Canal gave Europe an easier route to the East, and helped the emigration to Australia and the South African conquests, so the Panama Canal marks out a great future highway for commerce, and is destined to shake the New World to its foundations" (p. 587), throwing all the forces of European competition into the Pacific to dispute possession with Japan and the United States there.

The canal has been in use for eleven years with very moderate success and no signs of revolution.

The book has its full share of printer's mistakes (see pp. 5, 8, 91, 94, 96, 100, 106, 111, 275); and there are some slips that are too circumstantial to be so ranked. The unlucky passage in Malthus about nature's mighty feast appeared in the second edition of the Essay, 1803, not the first, and was withdrawn in the third, 1806, not the second (notwithstanding p. 153). "Increase and multiply" is a quotation not from the New but from the

Old Testament (*pace* 33). From the account of Hume and Wallace in the earlier part of the book (p. 71) we should gather that Hume sided with the Ancients and Wallace with the Moderns in regard to the populousness of ancient nations. This impression is not corrected till near the end of the book (p. 379). It is true that Hume loves the appearance of neutrality; yet the whole course of his discussion betrays his true convictions, in favour of the Moderns.

But it is a thankless task to pick out flaws in a book which has so many merits, in statement, criticism and illustration.

J. BONAR

Iron and Steel and the Industrial Revolution. By T. S. ASHTON, M.A. (Manchester: University Press. 1924. Pp. xii + 266.)

THIS is the second recent documentary study of the Industrial Revolution whose author calls himself a Manchester Lecturer in Economics. The Manchester School has been tilted to the historical side, and with remarkable results. Mr. Ashton has worked all the printed sources and also the MS. records of Boulton and Watt, the Darbys, the Huntsmans and several other early ironmasters or steel firms, besides those minutes of Ironmasters' meetings on which he based recently an important article for this JOURNAL. He justifies his claim to be a re-writer of the history of the Industrial Revolution from the documents, of Unwin's school. His book, though short, is very comprehensive and is admirably constructed—beginning with the charcoal-iron industry (capitalistic from the start); the obscure introduction of the blast furnace, and Dud Dudley, whom he pulls off the pinnacle on which early historians of iron put him and their successors had left him. "There is no valid reason why this Balliol undergraduate, rather than any one of a dozen other projectors of the seventeenth century, should have been singled out for fame" (p. 12). So to the fuel shortage of the late seventeenth century, the technical problems of the eighteenth, to Ambrose Crowley and the *Law Book* of his big North-country works, and to the development of such iron-producing areas as Furness and Merthyr Tydvil.

There follows an entirely original chapter based on the Darby and Huntsman MSS., much too technical for summary; then a chapter, technical and personal, on the relations between Watt, Boulton and the Wilkinsons, who made all the cylinders, and

much besides, for the Boulton and Watt engines. For piston rods, made of charcoal iron, they went to anchor-smiths accustomed to work the toughest irons, just as the car manufacturer of to-day goes here for his wheels and there for his wind-screens.

Next, Henry Cort and the history of puddling, which for a time was so concentrated in South Wales that it was "spoken of as the Welsh method"—a chapter full of information as to the size and industrial organisation of the integrated iron-works of the new era, with their mines, furnaces, rolling mills, slitting mills and what not.

A very fresh and interesting chapter on commercial policy before 1776 argues, with great plausibility, that the springs of State action "are to be found in the diplomatic relations of England with the north of Europe, rather than in the theorisings of mercantilists, or in the pressure of interested classes" (p. 108). It is most likely. We favoured the American colonies, by the Act of 1750 which removed duties from American pig and bar, less because we loved them than because the Swedes were in tow of the French (p. 119). The much-debated restrictions on the later stages of iron-working in the colonies Mr. Ashton inclines to regard as a real, if limited, hardship inflicted on the colonists (p. 127).

Coming to Peace and War, Mr. Ashton, I cannot but think, has rather missed the point of Sombart's argument to which he refers, and has strained his own argument too. "It is but a shallow view . . . to suppose that the interests of the ironmaster diverged from those of other industrialists" (p. 129), he says, and goes on to detail their sufferings in post-war slumps. Agreed, if we are on the long-period problem. But Sombart's main argument was that war stimulated metallurgical technique. Can anyone who has not forgotten 1914–18 deny it? May it not also have produced, in the short period, ironmasters' quasi-rents on a huge scale, especially when wars went on for seven years and upwards? Mr. Ashton shows us how miserable the ironmasters were after Waterloo (p. 153 *sqq.*), as they had been after other wars; but is it not possible that they had put some quasi-rents away into the funds? Their shrewd faces in his illustrations suggest it, and he tells us how they started banks.

Economists without antiquarian tastes, or who "do not much delight in personal talk," will probably turn first to Chapter VII, in which Mr. Ashton develops the study of early combinations in the iron trade which he began in this JOURNAL (Vol. XXX), and shows us ironmasters' associations at work in the Black

Country, South Wales, Yorkshire and Derbyshire before or shortly after 1800—fixing prices, curtailing output, and the rest. He gives parallels from other industries (p. 184), which might be added to, and justly attacks "that crude interpretation of economic history, according to which an original system of free competition has been metamorphosed into a new system of industrial monopoly." Careful readers of Adam Smith ought never to have been tempted into this crude interpretation; but he is not always carefully read.

The book ends with two chapters, as good as all the rest, on the ironworkers and the Puritan ironmasters—"Abraham Darby, Isaac Hawkins, Benjamin Huntsman, Shadrach Fox, Samuel, Aaron, and Jonathan Walker, Sampson and Nehemiah Lloyd . . . Joab Parsons, Zephaniah Parker"—with their marriages and intermarriages, their Quaker meeting-houses or Methodist chapels, their canal barges called Providence and Industry (p. 224), and the flow of their capital into banking—*via* Attwoods, Spooners, Barclays and above all Lloyds: "from a tiny slitting-mill and two small forges in the Midlands has proceeded one of the greatest forces in modern finance."

J. H. CLAPHAM

Condizioni Economiche e Finanziarie della Lombardia nella prima metà del Secolo XVIII. By S. PUGLIESE. (Torino, 1924, pp. 1–495.)

La Cassa di Risparmio delle Provincie Lombarde nella Evoluzione economica della Regione, 1823-1923. (Milano, pp. viii+572.)

THE first of these volumes is a section of the great *Storia Italiana*; the second is a centenary publication relating to the Savings Bank of Lombardy, containing contributions from the President of the Commissione Centrale di Beneficenza and Professors Luzzatti, Bachi, Supino, Ciasca, Pugliese, Gino Luzzatto, Benini, Corrado Gini and Boldrini. Together they present an account of the economic development of Lombardy from 1700 to the present time. Indeed Dr. Pugliese is too modest, since, in order to obtain the proper historical perspective, he often finds it necessary to continue his inquiry back to the Middle Ages.

A country's past, unlike a woman's, is always a golden age. Lombardy—the lure of conquerors from the north—dreamed of *its* golden age under the Visconti and the Sforzas in the fifteenth and sixteenth centuries. No doubt the past glories were exaggerated when viewed from the depths of the subsequent misery,

for its industry, however important from the artistic standpoint, was not a large part of the total activities of the people; indeed, as Professor Ciasca shows, Lombardy remained predominantly agricultural until 1860 (compare *Pugliese*, pp. 82, 83, *Casa Risp.* p. 368). However this may have been, the district for a long time was overwhelmed with ills; not only the long wars of the Spanish succession, the rule of Spain and later of Austria, but there were long and severe visitations of plague. Thus in the latter part of the seventeenth century the people were in great misery and the whole region suffered from great depression. Both labour and the scanty capital, in spite of prohibitions, were emigrating more and more; while, as real wealth declined, the rates of taxation were increased. Thus the present account begins in an atmosphere of almost unrelieved gloom. It is divided into three main heads, the state of agriculture, industry and the public finances. Dr. Pugliese is fortunate in the exact particulars he has been able to secure, enabling him to give much more detailed data than is possible in connection with British agriculture at the same period. The population is known (pp. 56–58), its density, the cultivated area divided between various crops (pp. 33–46). Land had become greatly subdivided and the number of minute properties was remarkable (pp. 71, 72). Nearly two-thirds was owned by private persons, about one-quarter by nobles and one-eighth by the Church (Table, p. 73). Industry was carried on under the domestic system (p. 102), but not entirely so. From 1718 onwards there are particulars of various entrepreneurs who employed a number of workers and used considerable capital. The part dealing with public finance is necessarily voluminous, for here, if anywhere, Arthur Young could have found his ideal of a multiplicity of taxes, and, what perhaps he would not have approved of, local variations in taxation. There were not only the local duties of the nature of an octroi, but also differences in the nature and the rate of tax as between the different provinces into which Lombardy was divided. Under Spanish rule, and to a less degree under that of Austria, the administration for levying and collecting taxes was greatly subdivided; and it is clear that in the effort to force the goose to lay better, it was slowly being killed. The impression produced on the mind of the reader is one of extreme fiscal confusion both as to principle and details. The following matters are of interest from various points of view. Included in the patrimony of the former Dukedom was the right to draw a revenue from water, in the form of navigable rivers or when it was used for purposes of irrigation (pp. 160–2).

Some remarkable instances are given of what the author describes as the confused system of the taxation of commodities devoid of any intelligible principle (p. 197). A tax, known as the *mensuale*, corresponding to *la taille* in France, was particularly burdensome (p. 263). Complete or partial exemption from taxation was granted on grounds of public service. This was in addition to the exemption of the nobility and the Church. The first resulted in gross favouritism (p. 301).

In the second half of the eighteenth century there were the beginnings of a revival in agriculture, as is shown by the increased valuation of land between 1750 and 1787, while that of property in towns continued to decline (*Casa Risp.* p. 343). The unity of Italy under the French (1805) was welcomed by the industrial classes and to a less degree by the agriculturists. It established a unit of currency and of measures in substitution for 11 different Italian monetary units, 180 lineal measures and 240 quantitative measures. Another consequence was the definite emergence of a middle class. Circulating capital was still scarce, and as a remedy for the poorer classes the Savings Bank of Lombardy was founded in 1823. It began humbly and by 1922 had deposits of two and a quarter milliards lire (p. 75). An interesting feature is a reproduction of the original advertisement of the institution (facing p. 12).

During the period of French rule agriculture advanced, and great attention was paid to canalisation—both for purposes of irrigation and transport (p. 357). Under the Treaty of Vienna, Lombardy passed again to Austria. While, politically, this may not have been satisfactory to the people, Professor Ciasca considers that the Lombards made magnificent economic progress through the settled conditions which obtained till 1859. Cultivation increased and more agricultural machinery and implements were used (pp. 355–65). As late as 1860, it is estimated that the capital invested in industry and commerce was only about one-sixth of that represented by the land and its cultivation. The textile industry was late in adopting the factory system, and in the middle of the nineteenth century the iron industry remained in much the same condition as in the Middle Ages (p. 376). When industry began to take the modern form there were difficulties through a scarcity of capital, which is one of those ironic contrasts when it is recalled that the Lombards were once the leading bankers of Europe.

After 1860 Professor Gino Luzzatto takes up the tale. Initiative began to reassert itself (p. 459). Later in the 'seventies came

progress in mechanical industry, and in the next decade Milan established as a great national market (p. 468). These and other industrial and commercial developments were required to compensate for the depression in agriculture which set in about 1887. The period of greatest productive expansion extended from 1898 to 1913, whence the account is continued during the years of war and up to the crisis of 1921. These and other changes are well illustrated by the series of tables furnished by Professors Gini and Boldrini (pp. 550–67).

Space fails to deal in detail with the very thoughtful and elaborate account of the Savings Bank by Dr. Bachi, in which the operations of the institution are analysed in great detail. It is of interest to note that Professor Camillo Supino's investigation confirms British experience, that depositors in savings banks attach more importance to security and facilities afforded for deposit and withdrawal than to the rate of interest (p. 337; cf. *British Finance*, 1914–21, edited A. W. Kirkaldy, 1921, p. 101).

W. R. Scott

Medieval People. By Eileen Power. (Methuen. 1924. Pp. viii + 216. 6*s*.)

Tudor Economic Documents. Edited by R. H. Tawney and Eileen Power. (Longmans. 1924. Pp. viii + 383 + 369 + 486. 45*s*.)

Here are two examples of the methods of teaching economic history. Miss Power's little book typifies the biographical way, intended for the general reader and beginner rather than for the specialist. She has also helped Mr. Tawney, her colleague at the London School of Economics, to choose for the more advanced student or professed historian a long and important series of documents drawn from printed and unprinted sources, portraying nearly every aspect of the social and economic life of a single epoch. The reader will take his choice. If he is wise and has the time, he will grapple with the documents in the day, and let the biographies entertain him in the evening.

The purpose of *Medieval People* is not primarily economic. It is to show that the peasant and *bourgeois* in the Middle Ages lived and moved and had their being, were the artificers of our modern civilisation every whit as much as the high feudality. But Miss Power's mind, when it is not occupied with the position of women in the mediæval period (and no one has done more for that study than herself), goes on an economic journey; haunts

Cotswold or Essex sheep-runs, moves with the merchant crowd on the Schiavoni or follows the trafficker under every sky. From a description of the simple struggle for subsistence ("The Peasant Bodo") she pursues Marco Polo on that greatest of mediæval trading adventure that beats even the best efforts of the Jesuits: then back to the economy (or financial laxity) of an English nunnery; then to the comfortable home of the Ménagier of Paris, where the good man is instructing his young wife, whom he terms his "sister," how to retain her husband's—and any future husband's—affections; and lastly to busy Thomas Betson, merchant of the Staple, as he ships his Gloucestershire fells, and to Thomas Paycocke of Coggeshall, a pillar of the English cloth trade, both of them thriving members of the middle class at a time when most people who read their text-books think that Englishmen, having chosen the colour of their Roses, were hewing each other to pieces. The primary and secondary material from which these lively chapters are constructed is set forth with equal vivacity at the end of the book. The choice of illustration is skilful, but rather darker printing both of negative and reproduction is desirable, and a small page does not seem to do justice to Chao Meng Fu's lovely landscape.

Miss Power has in each case digested her main authorities carefully, and her translations, as far as I have checked them, are vigorous and accurate. It is rather in the background, the general *mise en scène*, that she tends to overdo her effects: *e.g.* by her use of Canale's panegyric on Venice she comes near to mistaking the appearance for the reality, and to suggesting a prosperity far greater than that existing in 1268—one might almost be looking at a Canaletto; it is highly improbable that Bodo, tucked away in his manse, "benefited by Charles' love of minstrels"; bequests to various orders and congregations of friars do not necessarily imply in the testator "deep religious feeling." There are examples, too, where the attempt to vitalise the characters leads the author into being fanciful and over-speculative; the chapter on Madame Englentyne, which only Miss Power could have written, shows the attractiveness and at the same time the danger of this type of writing; and may I plead with her for greater care in the notes? "Odoric of Pordenone, who was a man before he was a friar . . ."; "modern research, iconoclastic as ever, not content with whitewashing Lucrezia Borgia and Catherine de Medicis, and with reducing Catherine of Siena to something near insignificance"—*dicta* of this type, and misprints such as "*su*ndolas" for "scindolas,"

" Stopford Brook " (p. 172), " Archivo Storico Italiano," " Imago Mondi," " Venetian History 1204 1400," " La Vi , Privée à Venise," etc., show (Miss Power will forgive me for saying it) a certain anxiety for effect and a touch of haste which mar work of considerable charm and unobtrusive skill; for there is labour and scholarship behind passages which flow so easily and attractively.

From the milk we pass to the strong meat of history. The three volumes of *Tudor Economic Documents* are planned primarily for London undergraduates taking the economic special subject, but they will appeal to a wider circle. Vol. I contains extracts on agriculture and rural society, industrial organisation, mining and metallurgy (an excellent feature), alien immigrants (particularly from the Low Countries) and the Statute of Artificers. Vol. II deals with foreign trade and commercial policy, with the contemporary system of credit and exchange and with the Poor Law. The admirable third volume will interest the literary historian as well as the economist, for it contains current views on commercial, industrial and monetary policy taken from contemporary literature and pamphlets, both prose and verse. Throughout the book one must admire the comprehensiveness and sweep of the survey, the careful preparation of the text, the laborious and accurate proof-reading; but the editors had their limits set them; an introduction to this great phalanx of material they might not write. There are, no doubt, adequate reasons for this; and yet it is the greatest pity. An earlier volume of extracts which Mr. Tawney edited with Mr. Bland and the late Mr. Philip Anthony Brown was prefaced by a most useful short enumeration of the more important documents printed, which made the structure of the book, and the reasons why the editors selected what they did, thoroughly intelligible. Surely in Vols. I and II forty pages could have been saved and an explanatory survey fitted in; or, in default of this, short historical expositions of the contents of each section, such as are to be found in Dr. Tanner's *Tudor Constitutional Documents*, would have served the purpose.

With the extracts on the agrarian problem, with which Mr. Tawney has already familiarised us, or on differentiation within, and amalgamation of, the crafts, the subject of the late Professor Unwin's well-known study, lack of space forbids us to deal. Where this book makes a definite and important addition to our knowledge of Tudor (especially Elizabethan) history is in the financial sections that reveal to us the " Canker," as Malynes

called it, the real trouble that was holding back that vigorous society with its Government paternally interested in every side of national welfare: the lack of facilities for credit, the dishonest manipulation of the exchange, the absence of a proper banking system. Never, except just after the Napoleonic wars or the years immediately following the Armistice of 1918, was such a wealth of serious, public-spirited proposals for reducing prices, re-populating the countryside, setting men to work and banishing vagrancy; never was there such belief in the efficacy of legislation or the power of Government to remedy. Only slowly, towards the end of Elizabeth's reign, did men come to see that the conditions producing "such marvellous dearth in such a time of plenty" were international as well as indigenous. Dignitie and Dutie, discussing together in John Howes' *Second Famyliar and Frendly Discourse Dialogue Wyse* the reasons for the great number of vagrant poor, epitomise the attitude of the majority:

> *Dutie.* And fyrste you shall understande that there ar twoe causes whie these poore doe thus wander in the Cittie. The one ys, as I saide before, throughe the carelesse and negligent government as well of the principall governours as other Inferior offecirs. . . . The other is, as I tolde you before, London can not relyeve Englande.
>
> *Dignitie.* I pray you make an ende of London before you enter into Englande, and tell me heare howe the faulte maie be remeadyed in London.

But finer minds saw further. At first "the alteration of the Coyn" and rack-renting had to bear the blame for the distress; yet so early as 1549 an anonymous memorialist addressed to Protector Somerset a document which came nearer to the truth. The "polices to Reduce this Realme of Englande unto a Prosperus Wealthe and Estate," printed here for the first time, fixes on the exchanges as the root of the trouble. "One cawse is the fawling of the exchaunge be twein vs and Flandres and betwein us and other nacions my meaning is not thabasing of our Coynes to be the cawse as the moste men Do affirme." Pay less for precious metals, export more goods, so that "mouche Bullion," representing the favourable balance, "may be brought from beyonde the Sees into the Kinges Mintes." Yet even then the exchange may go against us, unless manipulation and usurious transactions can be stopped; and discussion of the methods of tampering leads to proposals for fighting high and capricious

rates of interest and for stabilisation; above all, to projects for nationalising exchange business and the establishment of a public bank and an organised system of credit which should leave no loophole to the privateer. The Elizabethan trader and merchant was straining at the leash. Credit he must have, yet credit he could only get at absurd rates: he accepted them and up went prices in consequence; and the money-lender throve. Hence "usury," universally denounced, is the great Elizabethan topic of economic discussion.

It is the chief merit of these volumes that they bring trade and industry into relation with the all-important structure of credit, and depict the (often weak) monetary foundations upon which commercial enterprise had to be built. It is easy to condemn the contemporary economic thinkers as second-rate, as did a recent reviewer of Thomas Wilson's treatise on usury. The Tudor age was an age of action, and there was no academic study of value and prices. The proposals with which Cecil was inundated came from men intimately affected by the conditions they were trying to remedy, not from philosophic students. As such, they are surprisingly far-sighted, and of interest to an age of far finer technique and immeasurably greater international standards of business and good faith.

E. F. JACOB

Medieval Cities, their Origins and the Revival of Trade. By HENRI PIRENNE; translated by F. D. HALSEY. Princeton University Press. 1925. 249 pp.

IN lectures at Princeton and other American Universities one of the first of living historians and best of living lecturers put within reach of those who had not time to follow his articles, or to read his great *Histoire de Belgique*, views on urban origins which every economist—not historical economists only—ought to mark and learn. One had hoped to be able to say—here, in this little book with its small pages, is Pirenne for the busy economic man, who has no longer any excuse for not marking him. But the busy man has got his excuse, or at least half his excuse, given him in part by the University of Princeton and in part, one supposes, by the American Typographical Union. It is not a good translation, though it will do, and it gets worse as it goes on, until at last it has to be turned back into Pirenne's forcible lecturing French. The medieval city enjoyed "a law, an administration and a jurisprudence of exception, which made of

it . . . a privileged personality" (p. 220). "But these transactions [loans at interest by monasteries], forbidden otherwise by canonical law, were only temporary expedients" (p. 229). "Défendues du reste," one supposes: and why not canon law?

The printing is not first-rate. The battle of Legnano becomes Legnans and, in the bibliography, Mary Bateson sounds very French as M. Bateron. The price of the 249 little pages is 11*s.* 6*d.* net, due to the Princeton agents, the Oxford University Press. But in spite of that, and in spite of "exclusivism" and "a particular modality," where only a particular form or aspect is meant, and the city rabble (? "canaille") become "clodhoppers," the busy economic man should find his 11*s.* 6*d.* and digest his Pirenne. It will nourish him. He often pays more for some hollow pie of descriptive economics or helping of analytical hash.

J. H. CLAPHAM

The Greek Commonwealth. Politics and Economics in Fifth-century Athens. By ALFRED ZIMMERN. Fourth edition, revised. (Oxford: Clarendon Press. 1924. Pp. 471. 16*s.* net.)

A FOURTH edition of this famous work has now appeared. The new text contains only a few small corrections; a short appendix of notes has been added relating to some recent publications.

Part three of the book, which is somewhat more than half of the whole, is named Economics. It consists of a description of the economic life of the typical city-state. Its peculiar value is twofold. In the first place it is written with great vividness and sometimes beauty of style; it is enlivening and alluring; no one need fear to read it in his hour of leisure. The method of treatment is concrete, giving a succession of detailed pictures which remain in the memory; the reader learns by living through the old experience. Secondly, this work has a special value for the classical student which arises out of the juxtaposition of notes and text. The notes refer to passages, many already familiar to him, others unfamiliar, in the classical authors. Placed alongside of Mr. Zimmern's account of Greek life in its integrity they yield their fullest illumination. The book is thus extremely stimulating in leading us to search for rich significance in the most trivial phrase of our ancient texts.

The economist will find some topics admirably treated.

The chapter on Population is satisfying, that on Slavery novel. But sometimes he may well be perplexed. One leading contention is that the supply of skilled labour was permanently less than the demand; the skilled craftsman was never short of work or in danger of unemployment. "These craftsmen are not competitors at all. . . . There is work enough for all. And if anyone suffers, it is rather the public for want of craftsmen than the craftsmen for want of a public." When hoping for an explanation of this normal condition of under-supply, so blissful for the workers, we are told that "everyone at Athens was free to exercise any craft or calling he chose." Mr. Zimmern does not seem to feel the difficulty. He is probably carried away by enthusiasm in his account of the happy craftsman, as of the happy merchant, who did not have to travel by land: "His ship passed gently like a butterfly from one halt to the next." There is a larger contradiction in his main proposition. In the early chapters we are told that the Greeks were too poor to care much for the pursuit of riches. Having only what was necessary, they did not learn the fascination of acquisition for the sake of acquisition. Hence they had time to devote themselves to things of beauty and became wise in their knowledge of humanity. It is a hard saying that the poor think less of gain than the rich; but it may be so. Later on, however, we find that those who produced the most exquisite works of art were just those who had been infected with the spirit of the trader, the fifth-century Athenians. Thus the initial condemnation of the economic man as unfitted for better things is not justified by the subsequent development of the story. The economist's dialectic playing over this work must needs remain to some extent unsatisfied.

R. HARROD

Trade Routes and Commerce of the Roman Empire. By M. P. CHARLESWORTH. (Cambridge University Press. 1924. 12*s*. 6*d*. net.)

MR. CHARLESWORTH provides us with a competent and useful summary of the facts about the commerce of the main regions of the Roman Empire. The book would be more readable if it were not so highly condensed, and we should have been grateful if in his notes he had reproduced the more striking passages in the numerous authorities to which he refers us. Although his obligations to the monographs of other scholars are considerable, he has

scrupulously cited the primary sources, literary and epigraphical, for every statement of any consequence. He has made good use of the reports of archæological excavators, as may be seen by his remarks about recent discoveries at Ostia (p. 147), in the Tarim basin (p. 111) and in the ancient iron workings of the Sambre valley (p. 198). If his book dealt exclusively with routes the failure to provide any maps would be inexcusable; for the only map of routes already printed which he regards as at all adequate is that by Vidal de la Blache in the proceedings of the Academie des Inscriptions et Belles Lettres for 1896; and this is not within the reach of ordinary readers. In fact, however, Mr. Charlesworth has not attempted a minute study of routes, and much of his space is devoted to regional surveys of the several provinces, from the economic point of view. He describes the natural resources, the manufactures, the exports and imports, the markets and havens of each of the principal provinces. They are not all described on the same scale, and his treatment of Britain is distinctly slight, when we bear in mind the fact that his work is intended for English-speaking readers. Still he tells us much that is interesting and derived from unfamiliar sources.

It is remarkable how little we know about the organisation and the products of some of the leading industries of the Roman Empire. A good deal of information has been collected about pottery and glass. We have the Lex Metalli Vipascensis to illustrate the management of a large-scale Spanish mine. But about the textile industries, and all those which produced highly perishable articles our information is slender and unsatisfactory. We might have expected that the Oxyrhyncus papyri would throw some light on the textile industries of Egypt. But all they tell us is that Egyptian weavers had apprentices whose terms of service and remuneration were carefully defined in written contracts (pp. 29, 248). We might have hoped that the inscriptions of Gaul would tell us something useful about the woollen manufactures of the tribes whom Pliny enumerates as specially skilful. But the inscriptions only prove that the middlemen, the distributors, of these tribal industries were to be found in cities such as Burdigala, Vienna and Paris (p. 195).

The most attractive chapters in the book are those which deal with the Far Eastern trade. Mr. Charlesworth has profited by the explorations of Sir Aurel Stein, and he has used Hirth's *China and the Roman Orient* (Shanghai, 1885), which gives some instructive passages from Chinese sources. One of these passages attributes to the Parthians the design of controlling the silk trade

between East and West, and Mr. Charlesworth, working on this hint, finds in it the explanation of the constant efforts of Roman statesmen to keep open and to patrol the route leading from the Black Sea to the Caspian, which had been first exploited by the Seleucids (c. vi). It was a less obvious route to the East than that which passed through Mesopotamia, but it was not exposed in the same way to Parthian interference. The best route to India, the direct sea-voyage from the Red Sea to the Malabar coast, only became practicable in the first century A.D. when the sea-captain Hippalus had observed the periodicity of the monsoon, and had discovered that with the help of the monsoon it was possible to go to India from Egypt, and to return, within six months. The thriving commerce with South India which grew out of this discovery has been illustrated by archæological finds in the Nilghiri tombs, and by coins discovered in the neighbourhood of Coimbatore. This commerce ceased towards the end of the second century, but not before Roman geographers had acquired a fair knowledge of the coast-line of India up to the Ganges (pp. 68–73).

H. W. C. Davis

NOTES AND MEMORANDA

The Position of Russian Agriculture

The Russian *moujik* eagerly welcomed the new Revolutionary Government in October 1917. All the large estates were confiscated and passed into the hands of the peasants. The socialism of the peasant did not, however, extend beyond his interest in the land. When in 1918 the new Government began in earnest to give effect to the true principles of the Socialist regime, setting up the "agricultural communes," and organizing the Soviet Estates, the management of which was to be in the hands of the urban proletariat, and especially when it proceeded to requisition cereals to satisfy the food requirements of town and army, though unable to give any equivalent benefit to the peasant, the peasants in their turn began to show dissatisfaction, and often in unmistakable fashion.

In his conflict with the new Government over his land, the peasant preferred an economic passive resistance to a more active attitude of political opposition. He reduced his sowings to the bare minimum required for the needs of his family, and concealed his stores from the requisition agents. A rapid decline followed in industry, which no longer received the necessary raw materials from the farms. The result was chaos in the national economic life, and the interchange of products as between village and town entirely ceased. This state of affairs persisted throughout the civil wars, the blockade and the famines of 1920-21, and was in a certain measure the cause of each and all of these happenings.

The impossibility of extending the sown areas or of augmenting the agricultural production by the sole means of direct State regulation became increasingly apparent. The rapid break-up of the economic life of the countryside forced the Government in the spring of 1921 to make a radical change in its agrarian policy. From being a mere factor in the realisation of the proletarian State, the peasant now becomes an end in himself with his own immediate and inherent class interests, and thus passes from a position of complete dependence on the State to one that is more independent and leaves him at liberty to pursue

his own economic activities.[1] As, however, is inevitable in every period of transition, the development of the New Economic Policy (N.E.P.) did not pursue a consistently direct course.

Towards the end of 1922 the agrarian legislation of the period of militant communism was replaced by the Agrarian Code, which, while preserving the principle of land nationalisation, deals rather with the individual rural holding than with the collectivist undertaking managed on socialistic lines. The new land legislation no longer places administrative difficulties in the way of the free choice of the forms of land tenure. The land is granted to all citizens to be worked, with the usual rights of succession. No one may receive a larger portion than he can bring under cultivation by the labour of his own family. The letting of the whole or of part of the land is allowed only in exceptional cases and for a period not exceeding the usual rotation cycle, generally one of three years.

At this stage, however, as elsewhere, the capitalistic conditions, which are gradually being developed in the country, exercised a marked influence on the Agrarian Code. The homogeneous body of peasants, such as was found at the earlier period of the Revolution, gradually became differentiated along the lines of varying economic capacities. The average peasant is now found side by side with a superior class possessing capital and farm equipment of some value, and on the other hand with a poorer class unable to cultivate the lands allotted to them on account of their lack of means and other requisites. Hence, with the object of ensuring a more intensive cultivation of the land, on April 25, 1925, the Council of the People's Commissaries of the U.S.S.R. published a decree giving the right to the peasants to lease their own land without any restriction for a period not exceeding twelve years. This extension of the letting term cannot but have the result of encouraging the lessor to make a larger investment both of money and labour in his land, and also allows the landless peasant to improve his own economic position during the period. All forms of sub-letting, *i.e.* the transfer of tenant's rights to third parties, are absolutely forbidden, being considered a criminal form of speculation in the land that has been nationalised.

Faithful to their purpose of encouraging the development of the productive forces of the country-side, the Council of the

[1] See M. Tcherkinsky: "Agrarian Policy in Soviet Russia," *International Review of Agricultural Economics*, No. 4, 1924. Published by the International Institute of Agriculture. Rome, Oct.-Dec. 1924.

People's Commissaries in the spring of 1925 removed the restrictions with regard to the use of paid labour contained in the Agrarian Code. The wealthier farms, employing hired labour, are now allowed to use this labour freely with certain safeguards against any excessive exploitation. Thus a working day of over eight hours can only be arranged by mutual consent, having regard to the farm operations required at the different agricultural seasons. Young persons may be engaged if not less than fourteen years of age, or twelve years for work of a specially light character. Rural farm undertakings employing three hands at the same time paid on a yearly basis are obliged to pay for their insurance, etc. As a result of all these new legislative conditions the rural farm is being increasingly organised on a more systematic basis.

The cost of land improvements is now entirely borne by the rural population, which is keenly interested in the question of the amelioration of its own land, in so far as relates to the application of modern methods of cultivation and improved systems of rotation. The total of the payments made annually by the peasants for this purpose amounts to 6,000,000 roubles. Hitherto the Government has been unable to contribute any large sums for this work. The land settlement of the Russian Socialist Federal Soviet Republic (R.S.F.S.R.) alone would require for the whole area an expenditure of 230,000,000 roubles. During the next few years it is proposed to make an annual contribution of 12 to 15 million roubles. For carrying out special improvement works in the lands of the dry regions, which present the most serious difficulty for Russian agriculture, the People's Commissariat of Agriculture of the U.S.S.R. has recently proposed the constitution of a special fund of 77,000,000 roubles to be spread over the budgets of three consecutive years as follows: 20,000,000 roubles for the financial year 1925–26; 26,000,000 for 1926–27, and 31,000,000 for 1927–28. These amounts are to be used for improvement works and for the selective cultivation of seeds resistant to drought, etc. It is hoped that in this way some security will be given to the rural farm undertakings, and that the peasants in these particular parts of Russia will be safeguarded against the periodical return of famine such as occurred in recent years.

The Revolutionary Government, after having rejected the high-sounding idea of transforming life in all its forms according to socialistic theory, has thus gradually accommodated itself to actual facts, and is becoming more influenced by the capitalistic

spirit. As far back as 1921, Lenin declared that "capitalism is a curse when compared with socialism, though capital is a blessing when compared with the economic system of the Middle Ages." This evolution in ideas finds its counterpart in the progress of economic life. In particular, mention should be made of the progressive increase during the last three years in the areas under cereal crops, of which there were 50 million desiatines in 1922, 60 millions in 1923 and 66 millions in 1924. In 1925, according to the estimates of the Central Statistical Department, the sown area should show an increase of 4 per cent. as compared with the previous year. Side by side with the quantitative improvement in agriculture there is also proceeding an improvement in quality. In 1913 for every hundred desiatines of land sown with cereals (rye, wheat, barley, millet, buckwheat), there were 8·2 desiatines of textile and leguminous plants and root crops, whereas in 1924 this proportion rose to 13·2 per cent. The area sown in cotton in this year is reckoned as 561,000 desiatines as against 441,000 in the previous year. As compared with the corresponding area in 1915, the largest in the pre-revolutionary period, this figure represents 71 per cent. In Turkestan the cotton crop has already reached 80 per cent. of the figure for the pre-war period.

As regards the harvest for 1925, it is to be noticed that at July 15, according to the figures of the Central Statistical Department, the estimate of the total yield of cereals was over four milliards of poods. At present it is difficult to say exactly how much will be available for export, though the Central Bureau is of opinion that it will be possible to count on an exportation of 500 to 600 million poods of cereals, *i.e.* about equal to the average of Russian exports in the pre-war years. These estimates may, however, prove partially inexact. This was the case last year, when it was estimated that it would be possible to export 70 million poods of cereals. Insufficient account was, however, taken of the poor harvest in South-Eastern Russia, and as a matter of fact it was necessary to import from abroad 30 million poods. It is significant in connection with the crop forecasts for the present year that the prices of grain, after having shown last autumn a continuous increase, began as from the month of April in 1925 to exhibit a tendency to fall.

Russian cereal exportation has great possibilities in the future. It is sufficient to contrast the average productivity in Russia with that in other States. In 1924 the average wheat harvest per hectare were as follows: in Denmark 26·7 quintals;

in Belgium 25·7; in England 22·2; in Switzerland 20; while in Russia, in spite of the famous black earth regions, the average yield per hectare for the years 1909–13 was only 7·1 quintals, and therefore, with the exception of Bulgaria and Portugal, the lowest in Europe. In 1922 and 1923 the harvest gave on the average similar results, viz. 7·6 and 6·8 quintals respectively. In 1924, as a result of a partial famine, production fell to 5 quintals per hectare.[1]

It may be of interest at this point to examine the conditions of Russian foreign trade for the first six months of the year 1924-25 (October to March), remembering that the exportation of cereals, the chief item in agricultural exports, was perforce suspended. The following statement is reckoned at pre-war prices and in thousands of roubles.

AGRICULTURAL EXPORTS

	1924-25. (1st six months).	1923-24. (1st six months).
Cereals	14,665	139,556
Oilseed Cake	14,944	12,013
Seeds	19,212	6,363
Butter	2,944	3,420
Eggs	8,923	2,558
Flax and Fibre	44,406	14,012
Skins	24,444	25,782
Miscellaneous	25,451	8,702
Total	155,042	212,406

INDUSTRIAL EXPORTS

	1924-25. (1st six months).	1923-24. (1st six months).
Timber	22,181	24,369
Petroleum	23,042	14,024
Manganese Ore	7,988	6,030
Miscellaneous	23,148	10,207
Total	76,359	54,630

For the same periods imports were 150,000,000 and 233,000,000 roubles respectively. Thus, while aggregate exports were reduced by 36,000,000, imports show an increase of 83,000,000. In contrast to a considerable surplus of exports over imports in the trade balance of the previous year, the first six months of 1924-25 show an excess of imports over exports to the value of 2,000,000 roubles. The leading foreign country both as regards importation and exportation has been England, which has taken 29 per cent. of the total Russian exports and contributed 24 per cent. of the total imports.

[1] *International Year-book of Agricultural Statistics for 1924.* Published by the International Institute of Agriculture. Rome, 1925.

All the Central and Eastern European countries, which after the Russian agrarian revolution initiated schemes of agrarian reform, stand in great need of imported agricultural machines, with the possible exception of Czecho-slovakia; but in Russia, where there is an absolute "machine famine," the need is peculiarly acute. This year the estimated cost of the programme for the construction of agricultural machines is 32,700,000 roubles at pre-war values, or an equivalent of about 60 per cent. of the pre-war production, but the requirements of the peasants go far beyond the possibilities of internal production. The average value of the imported agricultural machines for the years 1911–13 amounted to 50,600,000 roubles, and Russia occupied a leading position in world trade as an importer of these machines, absorbing 40 and 20 per cent. of the total machine exports from Germany and the United States respectively. In the first six months of 1924–25 agricultural machines were imported to the value of 5,600,000 roubles as against 266,000 roubles in the corresponding period of the years 1923-24. It is obvious that a large field of commercial activity is here open for foreign capital, provided that the firms are prepared to give long credit. There is very little capital in the country, and therein lies the most complex problem for the Russia of to-day.

The peasants' inability to obtain adequate credit is a further obstacle to reconstruction in agriculture. On April 1, 1925, the total State agricultural credit amounted to about 140,000,000 roubles, the funds for the purpose being administered only through the Central Agricultural Bank of Moscow, the four Banks of the Republics, the 55 Regional and Provincial Credit Societies and the 8,560 co-operative societies of first grade. By October 1925 this total will probably reach 150,000,000 or 160,000,000 roubles. The inadequacy of this amount may be gauged by the fact that the total of the advances made through every channel of rural credit as on April 1, 1925, was equivalent to the sum of nearly seven roubles for each farm holding, whereas the average corresponding amount in the pre-war period was 50 roubles for each peasant family. If to-day the State wished to give 50 roubles to each of the 20,000,000 farm-undertakings, the total would amount to 1,000,000,000 roubles, and would thus be in excess of the whole of the financial resources available for the purpose. In order to increase the funds required for agricultural credit in general, the People's Commissariat of the U.S.S.R. Workers' and Peasants' Inspection has now raised the

question of taking advantage of part of the free funds in the State Savings Banks, and of part of the profits of the State insurance funds. In addition, the Third Union Soviet Congress in May 1925 has considered it advisable to pass a series of measures offering inducements to the peasants to place their savings at the disposal of the co-operative agricultural credit system. At the same time the Congress took its stand on the strict observance of the legislation which secures the entirely voluntary character of the co-operative societies, the freedom of election of the management, the inalienability of their capital, as well as absolute secrecy with regard to deposits. It is also proposed to issue in August 1925 a loan for 300,000,000 roubles, to be called the "Loan of the Economic Revival." The amortisation of this loan will begin in August 1926 and conclude in August 1930. The bonds will bear 10 per cent. interest and will be issued at their nominal value. The introduction of the loan on the money market will be made gradually so as not to cause any fall in the exchange. Industry, agriculture and co-operation will receive, in addition to this form of credit, in 1925–26, financial aid from the funds of the State budget, amounting to a sum of about 325,000,000 in the form of a long-term loan.

It might have been expected, in view of the effects of the War and the Revolution, which had reduced the number of the male population, and in view of the transfer of the large estates to the peasants, that any labour surplus would have practically disappeared from the village. The problem of over-population, however, is becoming more and more acute, and, as before the War, the peasants are forced to migrate to the "Promised Land" of Siberia. In 1923 the requests for migration permits amounted to 110,000, and rose to 150,000 in 1924, and to 158,000 for the first quarter of 1925. The People's Commissariat of Agriculture has fixed the contingent for the whole of 1925 as 118,500 persons, a number which is clearly too small.

While migration and the development of home industries may act as some relief to the present congestion of the rural labour market, the true solution of the problem will only be found when, side by side with such expedients, a more rational distribution of labour supplies is established between agriculture and industry, on the lines of the application of more intensive methods to agriculture and of the increase of output in industry.

M. N. TCHERKINSKY,

Editor of the *International Review of Agricultural Economics*.

Government Storage of Corn as a Precaution against Food Scarcity in War-time

About a quarter of a century ago this question was a good deal debated. The plan did not find acceptance partly because the danger was deemed unreal, but even more because it was supposed that it would involve impossible expense.

The Great War, in which the submarine assumed so much importance, showed that the danger is not at all one to be neglected. The object of the following notes is to demonstrate that the precautionary measure proposed cannot be set aside on the ground that its cost would be prohibitive. It is important too to observe that the expedient is a strictly defensive one, free therefore from the risk which accompanies increased armament, of provoking retaliatory measures by other powers; which may in the end react on our finances disastrously.

I attempt then a revision of former schemes in the light of our experience since 1914, and at the present level of world prices, taking a provision of *one year* as the least that could wisely be contemplated.

The annual consumption of Great Britain is 36½ m. quarters, of which 7½ m. quarters are grown in the island, leaving an annual necessary import of 29 m. quarters.

The cost at 60*s.*[1] per quarter would be £87 m., and warehouses with suitable silos built at say twelve centres good for railway distribution, and either at or not far from the ports of import, would cost a further £23¼ [2] m., giving an initial capital expenditure of £110 m.

After the purchase of the original stock was complete it would be important to disturb the normal corn-trade of the country as little as possible. Not only then should the original purchase be distributed over a considerable number of years (choosing years of good world-harvest for specially large purchase), but once the system was on foot the renewal of the grain should be carried out on a systematic plan pre-determined and publicly understood, which could therefore be counted upon. The disturbance to normal trade would then be negligible.

I suggest that within each month the Government brokers should be pledged to buy 250,000 quarters of newly-imported or

[1] This is a difficult datum figure to determine. Seth Taylor, the London miller, in his scheme which was examined by the Yerburgh Committee in 1897, assumed 40*s.* The average price for three years, 1918—20, was, however, nearly 115*s.*, whilst that for the following three years was 55*s.* 4*d.*

[2] A quarter of wheat in store occupies 9·6 cubic feet. I have reckoned 1*s.* 8*d.* per cubic foot as cost of erecting granaries. This equals 14*s.* a quarter.

of newly-grown British wheat, and to sell 250,000 quarters of the wheat that had been longest in their stores. The whole stock would thus be renewed each ten years. The Government brokers would of course sell at the highest and buy at the lowest prices they could obtain. The difference between these two prices would then not be one influenced by market fluctuation (except to the very limited extent possible in one month), but simply that measured by the deterioration of wheat during ten years' storage under good conditions; I find it difficult to know how much to allow for deterioration,[1] but am taking it at 3*s.* per quarter.

As to the storage period, an expert opinion is given me that "actually it is practicable to keep wheat in suitable storage (provided it is in good condition and that turning facilities are available) for an indefinite period. Commercially this is never carried out owing to interest, charges, etc."

The possibility of there springing up abuses and corruption amongst the brokers of the corn-exchange and those employed by Government would be very small. Britain's annual supply (in addition to home crop) would be 29 m. quarters, just as it would be if there were no Government warehouses, but of this quantity three millions, instead of coming direct from the exporting countries, would be delivered from the Government warehouses and be wheat of not quite such good quality.

The annual charge on the national revenue would be:

Interest on original capital (taken at 4¼ per cent.)	£4,950,000
Maintenance of fabrics of granaries (1 per cent. on original cost)	232,500
Keeping corn in condition by turning, etc., 29 million qrs. at 3*s.* (S. Taylor's estimate 2*s.*)	4,350,000
Loss on sale and replacement of one-tenth of this quantity at 3*s.* (S. Taylor's estimate 2*s.*)	435,000
	9,967,500
Add 1 per cent. for brokerage and expenses of management	99,675
	£10,067,175

Say ten million pounds.

This is higher than Seth Taylor's estimate of £1¼ m. (for about one-third of the quantity) even when one has taken into account interest at 4¼ instead of 2½ per cent. and the addition of 50 per cent. to the charges for depreciation and turning (as well as for the original cost of the corn), but present-day conditions probably make the above estimate by the present writer, though fairly conservative, sufficiently sanguine.

[1] Seth Taylor allowed 2*s.*, but for what period I do not know.

The figures do not of course pretend to be accurate (no forecast can be), but they are not so absurdly inaccurate that they give no kind of idea to the reader as to the measure of responsibility which a scheme of this kind would impose on the nation.

H. M. THOMPSON

Cardiff.

THE FIRST HALF-CENTURY OF "THE ACCOUNTANT" (VOL. 71)

THE two distinguishing features of the present stage of the evolution of our industrial organisation are the emergence of (*a*) the Accountant, and (*b*) the Advertising Manager. The first because the size and complexity of the present industrial unit has reduced management to the consideration of masses of figures and made the man of figures the fittest to survive, and the second because the great output of modern large-scale production has involved the inversion of the system of demand calling for supply and replaced it by a system in which demand is deliberately created and stimulated in order to absorb supply.

The Accountant came first, he is about half a century old. The Advertising Manager is younger;—the review of his first half-century is not yet.

In October 1874 *The Accountant* newspaper commenced its course and the last completed volume of the magazine therefore concludes its first half-century. That period may be regarded as covering also the life of the accountancy profession in England; the anniversary, therefore, affords an opportunity for a review of the rise to recognition of the most characteristic profession of the current industrial stage.

Half a century ago the Official Receiver in Bankruptcy was unknown and the bulk of the work of the professional accountant was connected with the winding up of the affairs of bankrupts—a department which fifty years later has a very small place in the practice of a leader of the profession. So predominant was it then, that in the first number of *The Accountant* its editor justified his enterprise by saying that in chronicling the "doings" of the profession he essayed to serve he would "discuss the law and practice in liquidations, in Chancery, and in bankruptcy." That this was a true witness as to the then interest of accountants is confirmed by the statement of Mr. Ernest Cooper, F.C.A., in a paper read before the Institute of Chartered Accountants, that "I well remember that to be seen talking to, or having your office entered by, an accountant was to be avoided, particularly in the

stressful times of 1866" (the year of the Overend Gurney crash). The editor's intention was well carried out;—nearly half the first number of his magazine was devoted to bankruptcy matters, and into the other half was crowded all the advertisements, editorials and other matters incidental to a first number.

In the year 1874 there was no provision in Statute Law that the accounts of Companies should be subject to audit. The old "Table A" provided that the auditor might employ an accountant to assist him, clearly showing that the auditor was still thought of as a member of the Company without professional experience himself. Where an audit was conducted, it consisted simply of a mechanical checking of the cash account of what would now be regarded as a very small business. Gradually, with the growth of Joint Stock enterprise and the development of the habit of investment by persons taking no active part in the business and unable themselves to check the use of their funds by the new class of business "organisers," the certificate of the auditor came more and more into prominence as the safeguard of the absentees—"the watchdog," as a solemn High Court judgment described him. So that first in practice and afterwards in law he became an indispensable official of the Company.

In more recent periods the increasing size of the unit of business and the growth of combines, vertical and horizontal, together with the increasing keenness of competition, have led to the emergence in administrative functions of the accountant as the man who understands the meaning behind the figures and reads elaborate statistical statements and charts which are mysteries to the non-professionally trained man. In many quarters since the war the training of an accountant is regarded as the best possible education for the higher administrative posts, and hence such a shining example as the appointment of Mr. D'Arcy Cooper, F.C.A., to succeed the late Lord Leverhulme in the direction of the great Lever concerns.

In these circumstances Sir Josiah Stamp in his recent book makes his appeal to the professional accountants, as having almost a stranglehold upon the data, to play the part which they alone can play in clothing the bare skeleton of economic theory with the flesh and blood of ascertained fact. A glance at the contents of the recent issues of the professional organ indicates what a change in this direction has already taken place, not only within the last fifty years, but within the last ten years. The time when accountants were first and foremost bankruptcy experts has long gone by and is almost forgotten. *Economics* (with Sir Josiah

Stamp as Examiner) is a compulsory subject in the examination of one of the two principal bodies of Accountants, as also is *Statistical Methods* (the Society of Incorporated Accountants and Auditors); whilst it is already an optional subject in the other (the Institute of Chartered Accountants). The interest in the subject which is so created in student days is maintained by the regular publication of articles and lectures on a wide range of subjects of economic interest in *The Accountant*. Recent issues have contained articles on such subjects as: Money; Currency policy and the Bank Rate; Mr. Flux has discussed the Census of Production; another authority has expounded Government Finance and its influence on British Banking; Prof. Smith has discoursed on Cassel's theory of the Foreign Exchanges; the Gold Standard and the return to it have been fully discussed in a series of articles by Prof. J. H. Jones; and in the volume before us there have been a number of other articles which must have delighted the heart of Sir Josiah Stamp, whose own paper, already referred to, appeared first in this JOURNAL.

W. J. BACK

OFFICIAL PAPERS

First Report of the Royal Commission on Food Prices.[1]

THIS Report, together with its two supplementary volumes of minutes and statements of evidence, contains a wealth of interesting and suggestive material. Readers of the JOURNAL will be aware that it deals only with bread and meat, and will also have taken cognisance of its chief proposal, viz. the establishment of a Food Council.

In studying the Report it is advisable to begin at p. 147, with the seven-page summary of its seven parts and its recommendations. After the summary the two dissentient reports by Mr. Ryland (individualist) and Mr. Smith (collectivist) should be glanced at (pp. 173–199) before the Report itself is attacked. The verbatim reports of evidence in Vol. II and the statements in Vol. III would be easier to handle if a brief topical analysis of their contents had been prefixed: the indication given on pp. iv to vi in the columns headed "Main Subject-Matter of Evidence" are too general to be of much service. Nearly all the "practical" men are worth reading with a view to descriptive economics. In particular Mr. A. H. Hobley, the Central Wheat

[1] Volume I. First Report, Cmd. 2390, 3*s*. 6*d*. net. Volume II. Minutes of Evidence, £1 net. Volume III. Appendices, 15*s*. net.

Buyer of the Co-operative Wholesale Society, and the brothers Vestey of "Union Cold Storage," "Vestey Brothers," etc., etc., should not be missed. Of the officials, Mr. Flux (Board of Trade) and Mr. Hilton (Minister of Labour) were in the main dealing with elements, and Mr. Thompson (Ministry of Agriculture and Fishing) with the Linlithgow Committee; Mr. Hawtrey (Treasury) again (on Food Prices and the Value of Money) is elementary. There is a useful memorandum by the Ministry of Transport (Mr. Hurcomb) on the present position in regard to railway rates and charges. Mr. Coates (Board of Inland Revenue) submitted estimates of profits in the food trades based upon income tax returns, this being the first occasion on which those data have been used for this purpose. Of the remainder, Dr. Bowley has some very suggestive criticisms of the Retail Price Index No. (cost of living). No one should miss the evidence of Mr. Wise, more particularly those sections in which Sir Halford Mackinder and Sir Auckland Geddes were cross-examining (? being cross-examined). The Earl of Crawford and Balcarres (Chairman of the Royal Commission on Wheat Supplies) was trenchant and weighty and seems to have influenced the Commission materially. Mrs. Hart's evidence ("from the point of view of the housewife") will make you (if you need it) think better of the human race.

The Report itself opens more questions than it settles, and the large measure of agreement among the members (only two real dissentients) was probably obtained by avoidance of sharp definition. On p. 2 we read, "we have been forced to the conclusion that at least some purchasers of bread and meat have to pay an unfairly high price for the loaves and joints which they actually receive." Not much "force" would be needed to bring any sane person to this conclusion. What we require is something like a definition of unfairness in price, a measurement of its extent, an estimate of the degree in which a Food Council can prevent it and of the cost of its prevention. None of these things do we obtain. Yet the document may stand as an interesting and sincere reflex of a mentality which is widespread to-day, where the mind is equally distrustful of competition, of combination, of nationalisation. Its danger is that the general atmosphere of suspended judgment may inhibit intensive and thorough examination of specific points. To the present writer it seems that this has occurred, and that a certain "woolliness" pervades the argument of the Commission.

An illustration may be found in the controversy over the

number of loaves produced per sack of flour. The trade evidence (in England) points to something less than 92 loaves per sack; the Commission believe that the true figure is 93 or more. Possibly they are right, but few will be satisfied that they have taken the necessary steps to reach their conclusion. First they seem to have made no examination of actual trade results under normal baking conditions: they refer to, but do not cite, evidence from the National Bakery School, London, and their chief reliance seems to be placed on experiments in the War Office Bakeries at Aldershot and Shorncliffe. These experiments yielded, in fact, an exceedingly ambiguous result on the crucial point, viz. what number of loaves can be produced within the limits of weight set by the Sale of Food Order.

A second illustration may be permitted. The Commission attach great importance to the considerable range in the prices of bread at any given moment: they seem, however, to have made little effort to explore the two relevant questions: (*a*) how far these differences are explicable at any moment by differences of quality or conditions of sale, (*b*) how far they do or do not cancel out through time.

So too with general theorising. Here again, as with statistics, the Commission seem to be able neither to discard the weapon entirely nor to utilise it thoroughly. They commence a paragraph (27) with the *cliché*, "Into this controversy we do not wish to enter," and continue it into something very like an *ex cathedrâ* pronouncement.

Up to date the cost of the Commission is given as just over £1400, whilst a further £1400 has been spent on publishing the three volumes.

H. O. MEREDITH

Committee on Industry and Trade. Survey of Overseas Markets. (H.M. Stationery Office, 1925. Pp. iii + 740. 6*s*.)

THE Committee on Industry and Trade appointed by the late Prime Minister in July 1924 "to inquire into the conditions and prospects of British industry and commerce with special reference to the export trade" followed the suggestions contained in the memorandum accompanying its terms of reference, and began its heavy task by surveying the present position of British overseas trade and the principal overseas markets for British exports "in order to ascertain the main factors *operating in those markets* by which the development of British export trade is or may be

affected." The material for this survey was derived mainly from information supplied to the Department of Overseas Trade in the ordinary course of its routine work, and to a less extent from memoranda prepared for the Committee by the Board of Trade on certain aspects of commercial policy and relations, *e.g.* commercial treaties, subsidies, etc. The whole is now published in the hope that British manufacturers and exporters may find it worthy of inspection and may profit by discovering new trade opportunities as a result of careful study of its many facts and figures.

The volume is thus largely a series of market surveys, which are arranged for the most part under certain broad headings covering the principal financial and economic aspects of the trade situation in each of the countries or groups of countries reviewed. The net is spread widely and, actually, all the world's trading communities are included. It is an extremely dull production; but an adequate index permits a manufacturer or an exporter readily to ascertain whatever is stated concerning his own special interests, without requiring him to read much else. In many important instances the information obtained will be little enough. To take one example, a comparison under the heading "competitive situation" of the several surveys discloses omissions in the case of almost every important industry where more detail and fuller treatment would have been welcomed by those for whom the work is intended.

To the student the more interesting parts are the introduction (pp. 1–26) and the memoranda with statistical tables prepared by the Board of Trade. The latter constitute a competent and useful piece of work, and afford evidence for what many teachers have suspected and have taught on the basis of inadequate calculations undertaken by themselves. There seems to be little doubt of the truth of the conclusions reached: (i) that, *measured in values*, an increased percentage of the world's trade has fallen to our share, but that this increase is at least partly due to a disproportionate rise of price rather than to an expansion of volume; (ii) that recovery and expansion of volume of overseas trade are being checked by a great increase in productive and distributive costs. Much stress is laid by the Committee on the growth of local manufacture as a cause of the falling off of British trade in particular markets, and the continuous trend or shift of international trade towards dealings in commodities of higher qualities and in goods the production of which depends on special skill or local advantages. All this, of course, is familiar enough

to students of market conditions; but the Committee, bearing in mind the audience it is addressing, does well to emphasise it and to point out the consequences for the British manufacturer. There is a cautious and well-guarded reference to long-run effects, concerning which the Committee is inclined to be optimistic; but, knowing that no business man cares much about these, it handsomely admits that the comfort for present-day individual traders may appear somewhat cold. The conclusion is reached that our manufacturers should strive with all their power to accommodate their outlook, their methods and their organisation to this new tendency, which, in the Committee's phrase, is one of several that need careful watching. Further volumes are promised when, in the consideration of the possibility and method of such accommodation, the whole field of commercial and industrial organisation and efficiency has been explored, including the relations among the classes engaged in production and distribution. *Di bene vortant.*

J. G. SMITH

Report of the Economic Commission on the Queensland Basic Wage. (Brisbane: Government Printer.)

IF an observer in another hemisphere may venture an opinion, the history of compulsory arbitration in Australasia falls into three principal periods or phases. Beginning—in intention at any rate—as a means to the prevention of disputes, the arbitration machinery soon became a normal method of wage-determination, dominated by the principle of a "living wage"—in particular, by the standard laid down by Mr. Justice Higgins in the Harvester case. More lately, a certain reaction has set in. The report on the Queensland Basic Wage (which was referred to in "Australian Notes" in the ECONOMIC JOURNAL for June 1925) belongs to this third phase and is characteristic of it in stressing (1) the limitations placed on the living-wage principle by the productivity of industry as a whole, and (2) the necessity of adjusting wage-standards to the circumstances of particular industries.

It declares emphatically that "the chief guide" to be followed in determining the standard wage for industries of average prosperity should be "the capacity of industry to pay wages," and that "cost of living" [*i.e.* the sum required to buy a minimum or "reasonable" standard of comfort] "should only be taken into account after capacity to pay has been ascertained." And it attaches "great importance" to "the principle of discriminating

between industries according to their prosperity." To assist the Arbitration Court in declaring annually the basic wage for industries of average prosperity, an "index of capacity to pay" should be constructed by taking the arithmetic average of (*a*) an index of the value of material production per head in the preceding year (as recorded in the Annual Production Bulletins of the Commonwealth Statistician), and (*b*) an index of the prospective value of material production per head in the year in which the declaration is made (based on crop reports and informed guesses as to the prospects of manufacture). But the basic wage should not vary automatically with this index; other relevant factors, such as unemployment in Queensland and wages in other States, should be taken into account: a wise proviso this, for all experience of sliding scales goes to show that "automatic" methods of wage-adjustment are the more successful the less automatic they are. If a particular industry is shown to be of more (or less) than average prosperity a higher (or lower) basic wage should be applied to it: the Court should not award a wage below the Harvester standard, but, when an industry cannot afford the standard, should suspend its awards if the workers are willing to work for a lower wage. The declaration of a *general* basic wage below the Harvester standard is contemplated as possible but improbable.

Thus the living wage or "cost of living" principle is not abandoned altogether. The proposals of the Report differ from existing practice mainly in substituting the principle of "capacity-to-pay"-modified-by-"cost-of-living" for that of "cost-of-living"- modified-by-"capacity-to-pay," and in casting an index of "capacity" for the rôle now played, in the Commonwealth and New South Wales, by an index of cost of living. They are significant symptoms of the trend of Antipodean opinion. Whether their adoption is desirable or practicable it is impossible, at this distance, to say. For English economists, the main interest of the Report lies in the confirmation by experience, as there recorded, of some accepted generalisations about the difficulties of applying the living-wage principle—*e.g.* its tendency to make wage-standards too uniform as between different industries (cf. North American experience); and in the bearing of the facts which it describes upon that re-statement of the theory of wages which seems to be called for by the dominant influence of massive combinations and of public opinion in the modern labour market.

G. F. Shove

Other Official Papers

Sixty-seventh Report of the Commission of His Majesty's Inland Revenue for the Year ended 31st March, 1924. Cmd. 2227.

Report on an Investigation into the Personal Circumstances and Industrial History of 10,903 Claimants to Unemployment Benefit. (Ministry of Labour, 1925.)

The characteristics of "claimants"—who must be distinguished from the "unemployed"—are inferred from a sample of about one per cent., which on comparison with the results of the similar inquiry in 1923 is judged to be adequately representative of the total body.

Report of the Committee on Stabilisation of Agricultural Prices. (Ministry of Agriculture and Fisheries. 6*s.* net.)

The causes for which remedies are sought fall under two heads: (1) Monetary, and (2) Variations in Volume of Supply or Conditions of Marketing. This Report will be reviewed subsequently.

Report of the Imperial Economic Committee on Marketing and Preparing for Market of Foodstuffs Produced in the Overseas Parts of the Empire. Second Report—Meat. (Cmd. 2499. 1925. 9*d.*)

Report by His Britannic Majesty's Government on the Administration under Mandate of British Togoland for the Year 1924. [Colonial, No. 14.]

The 188,000 Africans who live in this mandated sphere with 20 non-Africans (all British) are prospering, to judge from the answers to the "questionnaire" put to the Administration. The least satisfactory feature is the prevalence of diseases.

Economic Resources of Canada. By Sir Henry Rew. (Ministry of Agriculture and Fisheries. 1925.)

Canada is destined to be one of the chief sources of food supply. It is estimated that 440 million acres, or 31 per cent. of the land area (a territory exceeded only by China and Russia),

are available for agriculture. Public expenditure on agricultural development will be forthcoming. Men are required, and are not immigrating from England in such numbers as before the War. Are Englishmen becoming more gregarious, less willing to face the solitude of a farm in a prairie province?

Report Submitted to the Committee of the International Chamber of Commerce on Economic Restoration. (Paris.)

THE Report was prepared in accordance with a resolution of the Committee on Economic Restoration, nominating Sir Josiah Stamp, Mr. Alberto Pirelli and Count André de Chalendar a sub-committee to study the question of international transfers of reparation payments. The Report sets out (*a*) the economic principles underlying the problem, and (*b*) a programme of action.

Report by a Court of Inquiry concerning the Coal Mining Industry Dispute, 1925. Cmd. 2478.

THE main arguments are supplemented by Sir Josiah Stamp's addendum connecting the trouble with currency policy.

AUSTRALIAN NOTES

(*From our Australian Correspondent*)

AN ex-Premier of the State (Mr. Holman) recently said of New South Wales that "To-day it has reached a level where Economics is practically an unknown science." This, however, is opposed by some who at the various Australian Universities are actively engaged in teaching Economics. Sydney University offers special degree courses designed to provide a liberal education and incidentally a study of economic problems and a necessary knowledge of modern business principles and practice. Following up previous efforts, a meeting was held in Sydney on the 26th May, presided over by Professor R. C. Mills, to form a new Economic Society, and a committee was chosen to arrange for an inaugural public meeting. This is to be a branch of the larger Society, based on similar lines, branches of which have been formed in Melbourne, Brisbane and Hobart.

THE Queensland Branch of the Economic Society of Australia and New Zealand has already set to work, and its first publication is a paper by Mr. James Allen on "Business Problems and

Evolution." As president of the local Chamber of Commerce, the writer deals with the changes effected in the organisation of business, and comments on an effective analysis of the cost of retail distribution, particularly in regard to rents, advertising and sales on credit. He also advocated the endowment of a Chair of Commerce.

THE inaugural meeting of the New South Wales Branch of the Economic Society of Australia and New Zealand was held in Sydney on the 2nd July, when office-bearers were elected and the constitution of the Society was adopted. Professor R. C. Mills was elected as President of the Branch. At the next general meeting the question of an "Australian Loan Policy" will be the subject for discussion.

DR. H. HEATON, of Adelaide University, has accepted appointment to the Chair of Economics and Political Science in Queen's University, Kingston, Canada. His departure from Australia is regretted as being a serious loss to Economic students not only in Adelaide but in other centres.

THE first professor of Commerce at Melbourne University, Professor D. B. Copland, delivered his inaugural address on the 30th April, and incidentally referred to three special lines for development of research—commerce and business economics, labour and industrial relations, and public and business administration. At a meeting of the Economic Society in Melbourne on the 2nd June, Professor Copland gave an address dealing with the respective effects of internal and external public borrowing.

ALTHOUGH it may be said that the Australian Commonwealth has sufficient serious employment in connection with developing Northern Australia, Papua and the Mandated Territory of New Guinea, yet attention is being given also to the Antarctic Region, where Australians have already been prominent in discovery and exploration. Adelie Land, for instance, was provisionally taken possession of by an Australian Expedition under Sir Douglas Mawson in 1911, but the Commonwealth Government did not then take any definite steps in the matter. From recent advices it would appear that the French Government may possibly desire to hold Adelie Land, based on some ancient claim thereto. It is considered that in the interests of Australia it would be prefer-

able, in view of past efforts, to arrange that France should concentrate rather upon the zone south of Kerguelen Island and waive any claim to the Adelie Land section.

Topics upon which opinion is considerably divided and controversy active are the so-called " Desert Areas " of Australia and the degree of efficiency of white labour in the semi-tropical areas of North Australia. First, as regards such " desert areas," it may be conceded that more exact knowledge of the climatic conditions and natural resources of the inland regions of Australia tends more and more to reduce the size of what in time past was popularly stigmatised as the "arid Australian desert." This inland territory is still almost unutilised, its rainfall is small, and permanent water supplies on the surface are scanty, the soil being sandy and absorbent of moisture. Year by year, however, there is a widening both of that substantial fringe of the coastal areas of the Continent embracing land devoted or suited to agriculture, and further inland of the areas ascertained to be of value for pastoral pursuits. Both sections are being actively developed. Further exploration of northern areas ranging from west to east is now being undertaken with a view to discovering the possibilities of much virtually virgin country. It is manifest that there are great possibilities in regard to further settlement in parts bordering the Pacific and the Indian Oceans. One authority considers that there is plenty of room for twenty million people in Australia, though not in " the great empty spaces of arid Central and Western Australia or of tropical North and West Australia."

On the cognate question of the efficiency of white labour, Sir George Buchanan, who was commissioned by Government to inspect and report on Australian harbours, has returned and cursorily expressed the opinion that white labour in the north is not as efficient as black labour is in other countries—in Northern Queensland it is neither efficient nor economic. The position of white women was deplorable. Insanitary conditions were affecting males—unsuitable diet, intemperance, and inferior galvanised-iron houses, in some cases " tin boxes, which in the hot weather become ovens." The remedy suggested is for Government to insist on the provision of suitable houses, with education of the workers in the principles of tropical hygiene and feeding, the discomforts of high wet-bulb temperature to be ameliorated by use of electrical devices for lighting, fans, etc.

Current comment on such an expression of opinion is to the effect that "Obviously it would be a most desirable consummation if every settler in the north could dwell in a pleasant home, equipped with labour-saving devices, and a vegetable garden, and a store-room full of 'hot-weather' comestibles. But it all comes down to finance." In this connection we may refer to Professor J. W. Gregory's presidential address to the geography section of the British Association at Toronto. Formerly resident in Australia, he declared that after critical examination of the subject generally he had arrived at the conclusion that the white man is not physiologically disqualified even from manual labour in the tropics; hottest areas were often the healthiest; moist heat was very trying, but no reason existed why black men should be able to withstand a higher moist-heat temperature than white men, equability of oceanic climates being favourable for many conditions of health, whilst the chemical rays of the sun are not so inimical to the white man as once supposed, when appropriate clothing is worn. There was medical evidence as to less kidney trouble in the tropics than in temperate climates. One important economic consideration is that the amount of wealth produced in the tropics by a given amount of labour is much larger than the same labour can produce in the temperate zone. Dr. Elkington, Director of Tropical Hygiene of the Commonwealth Department of Health, now states that "careful observations show that northern families neither die out nor degenerate, nor do they show any evidence of commencing degeneration up to the third generation. The tropic-born woman is quite as healthy as a woman born elsewhere. Her children at school age are taller and healthier than, and at least as mentally equipped as, children elsewhere in Australia."

On the whole Australians appear confident that the semi-tropical areas can be developed by a white population given time and suitable financial facilities.

A. Duckworth

June 17, 1925.

Current Topics

The following have been elected to membership of the Royal Economic Society :—

Adam, T. S.	Blake, A. B.	Burrows, H. R.
Alban, F. J.	Blois, W. G. T.	Burton, W. S.
Bacon, F. G.	Borg, C. J. N.	Butterworth, V.
Bentley, C. W.	Brattle, W. P.	Campling, S. J.

Cochrane, J. W.
Collinson, W. L.
Cooksley, A.
Crouch, S.
David, I.
Davis, F. G.
Dunlop, W. R.
Edwards, R. W.
Elworthy, W. R., O.B.E.
Ewens, Capt. G. P.
Fellman, A. L.
Field, Prof. J. A.
Gerrard, W. H.
Gifford, T. J. C.
Gray, W.
Harding, F. W.
Heath, M. S.
Hutton, A. W., M.B.E.
Jain, L. C.
Jong, A. M. de.
Keilhau, Dr. W.
Kiong, C. I.
Lallemand, Rev. Prof. A.
Liang, L.
McGuiness, F. W.
MacKay, D.
Manson, J. H.
Mathur, R.
Mathur, S. S.
Morris, J. A.
Nambi, P. S. V.
Ohlin, Prof. B. G.
O'Loughlin, J. R.
O'Mahomy, J.
Park, J.
Parkinson, H. W.
Pearsall, C. W.
Pilkington, W. G.
Pitcher, F. H. E.
Price, C. J. R.
Pritchard, E.
Ray, R.
Regan, E. D.
Rendon, J.
Robinson, Prof. J. S., Ph.D.
Seth, R. K.
Shannon, H. A.
Sheard, H.
Shrivastava, N. P.
Small, F. W. G.
Snelling, B. S.
Suri, H. C.
Thung, L. L.
Watkins, G. A.
Watkins, G. D.
Weston, Prof. N. A.
Wilkinson, L.

The following have compounded for life membership :—

Alban, F. J.
Bruins, Prof. G. W. J.
Corder, B.
Gifford, T. J. C.
Hawes, S. T.
Horton, G. P.
Lallemand, Rev. Prof. A.
Liang, L.
Shumshair, Capt. T.
Thakur, B. T.

The following have been admitted to library membership :—Biblioteca dell' Universita, Perugia; The T. Eaton Co., Ltd.; The Imperial College of Tropical Agriculture, Trinidad; Office des Paiements de Reparations, Berlin.

Sir William Ashley has retired from the Professorship of Commerce in Birmingham University after twenty-four years' service. He has been succeeded by Mr. J. F. Rees, lately Reader in Economic History in the University of Edinburgh, who, as a scholar of Lincoln College, took a First Class in the Honour School of Modern History at Oxford. At the same time the opportunity has been taken to improve the stipend and status of the Professorship of Finance, held by Professor J. G. Smith, a pupil of Professor Bastable and a distinguished Mathematical Scholar of Trinity College, Dublin, and to place this Chair on the same footing as

the Professorship of Commerce. Fellows of the Royal Economic Society will wish to Sir William Ashley, the first man to occupy a Professorship of Commerce in these islands, long life and health in his retirement, and strength to make many further contributions of importance to the subjects of Economics and Economic History.

In what might be called his "educational testament" the retiring Professor said that his Faculty had aimed at treating the subjects of instruction in a scientific spirit; by which he meant "the spirit which tries to keep out of the slough of mere information; which seeks for causes and aims at generalisation." He does not, however, abandon his well-known opinion that abstract reasoning in Economics has had far too great a value assigned to it. The function of a Faculty of Commerce is to make business intellectually interesting, and by so doing to help the young man to carry an alert mind through the dull years of necessary subordination to detail. They had realised that in manufacturing concerns the rôles of commercial management and technical guidance were very different, but they had thought from the first, and experience had confirmed the belief, that even a man who was going to be occupied entirely with the commercial side would benefit by having more knowledge of processes, and that it would not be unworthy of their great applied science departments to provide for the needs of such a man. He hoped that, as the number of commercial students increased and technological staffs were enlarged, these departments would be able to give the commercial students more help. He looked forward to closer relations and co-operation between them.

Mr. G. D. H. Cole has been appointed to a Readership in Economics in the University of Oxford to be held in conjunction with the Mynors Fellowship in Social Science at University College. He is to hold office for seven years. Before the end of that period the teaching of economics may be simplified by the abolition of the capitalist system, if the Reader of Economics is right in his belief that "the present economic order is breaking down and that its definite collapse is a matter not of decades but of years" (*Chaos and Order in Industry*, 1920, p. 24. Cf. pp. 11, 224).

Professor Henry Clay, Stanley Jevons Professor of Political Economy in the University of Manchester, has been appointed chairman of a Commission set up by the Union Government to

inquire into economic conditions in South Africa. The origin of the Commission is as follows. In the last session of the South African Parliament the Government introduced a Wages Bill, which, among other things, provides for the setting up of a Wages Board. This Board will be empowered, on the application of any industry, or of the Minister of Labour, to fix a legal minimum wage for any specified industry. In taking action the Board will be required to have regard to the cost of living, a "civilised standard of life," and other factors.

Dr. J. E. Holloway, Professor of Economics at the Transvaal University College, Pretoria, has been appointed Director of Census to the Union of South Africa.

Dr. E. H. D. Arndt has been appointed acting-professor to fill the post vacated by Dr. Holloway.

OUR Japanese Correspondent writes :—

The Japanese budget for 1925–1926 was passed by the Diet without any substantial amendment. It was framed with a view to drastic retrenchment, the avoidance of any fresh issue of bonds, and the reform and unification of various special accounts. The expenditure was cut down by 152,000,000 yen in the general budget and by 104,000,000 yen in special budgets. Various reforms were carried out in administration, and 40,000 officials were dismissed, besides the reduction of four divisions in the army. Notwithstanding such drastic retrenchment, the total expenditure of the general budget still stands at 1,549,000,000 yen. But when we remember that in this is included 228,000,000 yen of expenses connected with the great earthquake, the effort of the Finance Minister must be duly recognised.

The number of unemployed seems to increase, being estimated by some to exceed 2,000,000, of which 100,000 are on strike. The dissension between the workers of extreme views and their opponents is weakening the power of unionism, and the prospect of Labour legislation, such as laws concerning Trade Unions and Workers' Insurance, Reform of Factory Acts, and Old Age Pensions, being presented to the Diet in the near future is not very hopeful.

THE *Emile Waxweiler Endowment* has been established in order to promote the studies devoted to the various phenomena of social life according to the conception and method of Emile Waxweiler as they have been defined by him in the preface to

his *Archives Sociologiques.* The income accruing from the fund will be employed to further scientific travels, investigations or researches in universities, libraries, archives, museums, etc., in Belgium or in foreign countries; to meet the cost of publications or scientific enterprises; to organise prize competitions and generally to encourage any kind of activity that would contribute to the purpose of the Endowment. Applications should be submitted before the 1st day of October in each year. There is no restriction relating to age, sex or nationality. A prize of 3,000 francs is now offered for competition on *A Study dealing with the Mechanism of the Propagation of Ideas in our Contemporary Societies.* Further particulars can be obtained from *Le Secrétaire Perpétuel, Académie Royale de Belgique, Palais des Académies, Brussels.*

In consequence of certain cases of incorrect usage to which their attention has been called, the Council desire to remind Fellows of the Society that they are not entitled to use the letters F.R.E.S. after their names, and that the authorised contraction is F.E.S.

The first issue of the Economic Journal has been long out of print, and most recent purchasers of complete sets of the Journal have had to be content with a copy of the first volume which lacks the first issue. The Council have therefore had under consideration the question of preparing a reprint, and are prepared to undertake this, provided it appears that a sufficient number of libraries and members of the Society are desirous of acquiring copies of the first issue. Whether or not the Council will be able to proceed with this will depend upon the extent of the response which is made to this notice. In the event of the reprint being undertaken, copies would be supplied at a price not exceeding 10*s.* each, and less if a sufficient number of copies are ordered. Will any Member or Library who is prepared to subscribe for a copy of the first issue, with a view to completing his run of the Economic Journal, kindly communicate with the Assistant Secretary, Mr. S. J. Buttress, 6 Humberstone Road, Cambridge?

It is hoped to publish before the end of the year the special additional issue of the Economic Journal devoted to Economic History, which was announced in June. Contributions intended for this issue should be sent to the Editors as soon as possible.

RECENT PERIODICALS AND NEW BOOKS

Economica.

JUNE, 1925. *The History and Prospects of Vital Statistics.* DR. HARALD WESTERGAARD. The lecture given in University College, London. *British Commercial Policy in the Eighteenth Century.* PROF. J. F. REES. *The Economics of Family Endowment.* EVELINE M. BURNS. So little is known about human motives that we cannot foresee the effects of the scheme on the birth-rate and on production. It is doubted whether the scheme would solve the problem of equal pay for men and women.

Journal of the Royal Statistical Society.

MARCH, 1925. *An Agricultural Census.* R. J. THOMPSON. *The Fishery Statistics of England and Wales.* E. S. RUSSELL and T. EDSER. The use and methods of "Icthyometric" work are set forth. *Wholesale Prices of Commodities.* THE EDITOR OF THE "STATIST." The index-number for 1924 was 139; against 129 for 1923 and 131 for 1922.

MAY. *Official Railway Statistics in Great Britain.* C. W. HURCOMB. *The Bearing of Labour Unrest upon the Path to be taken to Sound Currency.* ALFRED HOARE. The income-tax should be gradually increased and the surplus thus obtained should be employed in part to stimulate employment, in parts for deflation and the redemption of debt.

Quarterly Review.

JULY, 1925. *The Trades Union Report on Russia.* SIR BERNARD PARES. "One who has given most of his life to the study of contemporary Russia," and "has kept himself independent of every party," describes the writers of this report as not qualified for the task and their writings as most inaccurate and misleading.

The Edinburgh Review.

JULY, 1925. *Marketing Problems of American Farmers.* SIR HENRY REW. The co-operative marketing movement among American farmers is vigorous. *National Finance.* HAROLD COX. The Budget contained one good feature, Mr. Churchill refusing to meet expenditure by inflation.

International Labour Review (Geneva).

MAY, 1925. *Social Insurance Benefits.* PROF. A. MANES. *The Medical Profession and Health Insurance in Great Britain.* DR. A. COX. *The Shanghai Child Labour Commission.* DAME ADELAIDE ANDERSON.

JUNE. *The German and French National Economic Councils.* ROGER PICAR. *The Agrarian Problem in Spain.* FERNANDO DE LOS RIOS. Owing to the appropriation of common lands the mass of the population have either no land or not enough to support a family. Compulsory purchase and redistribution of land is recommended.

Quarterly Journal of Economics (Cambridge, Mass.).

MAY, 1925. *Chapters on Machinery and Labour.* G. E. BARNETT. Referring to the manufacture of glass bottles. *A Moving Equilibrium of Demand and Supply.* H. L. MOORE. *Economic Psychology and the Value Problem.* FRANK H. KNIGHT. Economists have erred in assuming that behaviour can be treated in objective scientific terms alone. The recognition of *purposes* is essential. *The Taxation of Unimproved Land in Australia.* H. HEATON. A long history terminates with the reflection that it is as difficult as ever to find new land for new settlers. *The Early Development of the American Cotton Manufacture.* CLIVE DAY. Surveying the number of factories established in each year, the writer is inclined to Rabbeno's idea of industries creating a tariff rather than the protectionist idea of the tariff creating industries.

The American Economic Review (Cambridge, Mass.).

JUNE, 1925. *Germany's Capacity to Pay and the Reparation Plan.* FRANK B. GRAHAM. *Three-Dimensional Diagrams in Illustration of Consumers' Demand and of Interest Rates and Savers' Surplus.* A. B. WOLFE. These complicated diagrams are said to be specially adapted to rates of interest and savers' surpluses. *The Definition of Income.* W. W. HEWETT. Income is defined as a flow of commodities and services, not simply of services. Savings are included as income. *Fact and Metaphysics in Economic Psychology.* FRANK H. KNIGHT. Against the "Behaviourists" it is argued that the methods and categories of physical science are not adapted to Sociology and Economics. *Labour Governments and the Social Revolution.* J. E. ROSSIGNOL. Facts and arguments are adduced to show that Labour Governments are not a menace to private property. *Liberty Bonds in Payment of Estate Taxes.* ROBERT A. LOWE. *Theory of Value and Natural Resources.* JOHN ISE. "All efforts on the part of the Government to keep down the price of lumber—as far as lumber is a gift of Nature—gasolene, oil products, natural gas and anthracite are probably contrary to the public interest."

Journal of Political Economy (Chicago).

JUNE, 1925. *The Balance required of Borrowers.* R. B. WESTERFIELD. *Analysis of Profit.* R. LEHFELDT. The theorem of the [? some] mathematical economists, that profit would vanish in a stationary State, ignores compensation for risk—the weather would still be variable—and payment for the shareholders' function of directing resources into one occupation rather than another; in return for which it is considered that ordinary shareholders do, as they seem to, obtain dividends much exceeding the current rate of interest, the amount of capital lost in a country like England not being large. *Tariff Devices and Depreciating Currencies.*

W. MUHLBACH. A country may logically adopt a special protective policy against "exchange dumping," but cannot expect that the device will operate accurately.

Annals of American Academy (Philadelphia).

MAY, 1925. *Science in Modern Industry.* Scientific methods in purchasing and budgeting and various aspects of management are among the subjects treated by several writers.

Bureau of Labour Statistics (Washington).

No. 357. *Cost of Living in the United States.* Statistics of the income and expenditure of 12,000 families in 92 cities or localities situate in 42 States, show that the proportion of income spent on food and also on rent is less the larger the income, that the average number of persons in a family is greater the larger the income, and many other interesting particulars.

No. 366. *Retail Prices,* 1913 *to December* 1923. The trend of prices for different articles of food and food as a whole, for coal, gas, electricity and dry goods is exhibited in numerous charts and tables.

No. 380. *Post-war Labour Conditions in Germany.* R. B. KUCZYNSKI. Statistics of population, wages, cost of living, hours of work, unemployment, etc., affording interesting comparison with conditions in the year 1913.

No. 383. *Works Council Movement in Germany.* B. STERN. Of the two functions prescribed to the works councils by the law, representing the interests of the employees, and helping the employees to raise the efficiency of production, they seem to have performed the *second* more successfully.

Journal des Économistes (Paris).

APRIL, 1925. *Les interêts économiques et l'œuvre socialiste.* YVES-GUYOT. *Les Sociétés à responsabilité limitée.* FERNAND-JACQ. Referring to the law of March 1925, which sanctions companies with limited liability.

MAY. *La crise agricole aux États Unis.* YVES-GUYOT. *Demandes de diminution d'impôts en Grande-Bretagne.* W. M. J. WILLIAMS.

JUNE, 1925. *Saint-Simon et son école.* YVES-GUYOT. *La colonisation rurale par les Français.* A. BOUTON.

Revue d'Économie Politique (Paris).

MARCH–APRIL, 1925. *Le mouvement de la population.* J. BOURDON. The French marriage-rate is one of the highest in the world. The hygienic conditions are average; but the age distribution resulting from the continued decline of the birth-rate causes the death-rate to be one of the highest. *Le mouvement des prix et des Salaires.* M. LENOIR. The increase of wages in France during the last two or three years has nearly kept pace with the increase in retail prices and the cost of living.

Jahrbücher für Nationalokonomie und Statistik (Jena).

MARCH–APRIL, 1925. *Die Uebertragungs problems.* WALTER EUCKEN. On methods of remitting large sums (*e.g.*, for reparations) to foreign countries. *Zur Frage der steuerlichen Lastenverteilung.* A. AMONN.

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

VOL. LIII., No. 3. *Das problem einer Soziologie des Wissens.* KARL MANHEIM. *Wieser's Theorie der gesellschaftlichen Wirtschaft*, II. PROF. A. AMONN. *Die Überschätzte Handelspolitik der offenen Tür.* DR. SIEGMUND SCHILDER.

Weltwirtschaftliches Archiv.

APRIL, 1925. *Das ernährungsproblem der Völker und die Produktionsteigerung der Landwirtschaft.* PROF. F. AEREBOE. *Friedrich List in Amerika.* DR. WILLIAM NOTZ. *Antimarxismus.* L. MISES. *Das Standortsproblem in der Wirtschaftstheorie.* DR. ANDREAS PREDÖHL. *Die gestaltende Kräfte in der Amerikanischen Wirtschaftentwicklung seit dem Krieg.* DR. H. A. LUFFT. *The Development of International Relations.* HORACE G. ALEXANDER. The "shortcoming of international law" as set forth by Professor Brierly and the sinister influence of financial interests are noticed (in English).

Zeitschrift für die Gesamte Staatswissenschaft (Tübingen).

1925. No. 2. Discussions of concrete subjects, the entrance of Germany into the League, and the economic effect of the Reparations, are followed by a criticism of "nominalismus" in monetary theory.

Weltwirtschaftliches Archiv (Jena).

JULY, 1925. *Der Klassische Begriff der Weltwirtschaft.* PROF. EUGEN BÖHLER. *Industrie im Geiste Henry Fords.* PROF. F. V. GOTTL-OTTLILIENFELD. On "Fordismus." *Probleme der internationalen Sozialpolitik.* PROF. AUGUST MÜLLER. *Das Scherenproblem in Sowjetrussland.* DR. HAM-JÜRGEN SERAPHIM. On the problem presented by the fall in price of agricultural products while the price of manufactures rises.

Giornale degli Economisti (Rome).

MARCH, 1925. This number is wholly dedicated to the memory of Pantaleoni. First Professor Loria writes on the "mental evolution" of the great Italian economist; distinguishing the Ricardian character of his early work on the shifting of taxes from a later stage at which the conception of marginal utility was predominant. Admiration of Pantaleoni's work is tempered with criticism of his views on co-operation and socialism. Nine of the élite of Italy's economists follow with reflections on various aspects of Pantaleoni's genius.

APRIL. The tenor of this number is similar to that of the preceding. It begins with the reminiscences of Professor De Viti de Marco and ends with a bibliography of Pantaleoni's writings—a list extended to several pages by monographs and articles in periodicals.

MAY. *La formazione der prezzi delle azioni industriali durante l'inflazione cartacea.* C. BRESCIANO-TURRONI. The prices of capital are shown in the light of German experiences, not to be affected like those of commodities by monetary inflation. *Trasferimenti di immobili.* MARIO BACHI.

La Riforma Sociale (Turin).

MARCH–APRIL, 1925. *La eliminazione dell anormalità monetarie.* R. BACHI. A return to gold on the basis of the present value of the lira is advocated. *Un ministri reformatore del secolo XVIII.* G. PRATO. *Il premi all esportazione nascenti dal deprezzamento della moneta.* A. GARINO-CANINA.

MAY–JUNE, 1925. *Realta economiche e miti sindicalistici.* G. PRATO. A study in the function of workers' combinations; referring to Rosselli's articles in the *Riforma*, 1924. *Su i prezzi, i balanci famigliari*, etc. DR. A. GEISSER.

Scientia (Milan).

JULY, 1925. *The Influence of Death Duties on the Socialization of Wealth.* J. C. STAMP. The principles of inheritance duties are discussed with special reference to Professor Rignano's scheme. The article will form the preface of *Social Significance of the Inheritance Tax* in the English edition which will shortly appear.

Metron (Ferrara).

MARCH, 1925. *Les indices économiques.* L. MARCH. A supplement to the writer's masterly article on the subject in the first volume of *Metron*: "Statistical Aspects of the Problem of Human Nutrition," Major Greenwood.

NEW BOOKS

English.

BADON (B. F.). India's Exchange Problem. Bombay: Commercial Printing Press. 1925. Pp. 70.

BALDWIN (RT. HON. STANLEY, M.P.). Peace and Goodwill in Industry. London: Allen & Unwin, Pp. 79. 1*s*. 6*d*.

[Three speeches: the one delivered in the House of Commons, March 6, 1925, and two delivered respectively at Birmingham and at Leeds, forming an introduction and a supplement to the great speech in Parliament.]

BARRY (IAN). Speculations in Economics. London: Williams & Norgate. 7*s*. 6*d*.

BURNETT-HURST (A. R.). Labour and Housing in Bombay. A Study in the economic conditions of the wage-earning classes in Bombay. London: King. 1925. Pp. 152.

COPLAND (PROFESSOR D. B.). Commerce and Business. Melbourne: Macmillan and University Press. 1*s*. 6*d*.

CHABLANI (H. L.). Indian Currency and Exchange. Oxford University Press. 1925. Pp. 184.

DARLING (MALCOLM L.). The Punjab Peasant in Prosperity and Debt. Oxford University Press. 1925. Pp. 290.

[In the course of a foreword which Sir Edward Maclagan contributes he says, "Mr. Darling has in this book made a notable contribution to the economic literature of India. He has given us a vivid picture of the peasant's attitude towards the supply and use of capital."]

DOBB (MAURICE). Capitalist Enterprise and Social Progress. London: Routledge. 1925. Pp. 409.

Double Taxation and Tax Evasion. Report and Resolutions submitted by the technical experts to the Financial Committee of the League of Nations.

FISHER (MRS. H. A. L.). Then and Now. Economic problems after the war a hundred years ago. With an introduction by the RT. HON. DAVID LLOYD GEORGE. Oxford University Press. 1925. Pp. 117.

GADGIL (D. R.). The Industrial Evolution of India in Recent Times. London: Milford. 1925. Pp. xix+242. *7s. 6d.*

GEALE (R. G.). International Commerce and Economic Theory. London: King. 1925. Pp. 161.

["The examination of Professor Bastable's *Theory of International Trade* embodies notes made early in 1904, and the economic history of the last twenty years has confirmed the conclusions then formed, that the Ricardian doctrines as they are are unsound in theory."]

GEARY (FRANK). Land Tenure and Unemployment. London: Allen & Unwin. 1925. Pp. 256.

GOLDENWEISER (E. A.). Federal Reserve System in Operation. London: Magraw-Hill. 1925. Pp. 349.

GREGORY (T. E.). The Present Position of Banking in America. With an introduction by WALTER LEAF. Oxford University Press. 1925. Pp. 40.

HALLSWORTH (J.). The Legal Minimum. London: Labour Publishing Co. 1925. Pp. 95. *2s. 6d.*

[The author is General Secretary of the National Union of Distributive and Allied Workers.]

HIRST (F. W.). From Adam Smith to Philip Snowden. A history of Free Trade in Great Britain. London: Fisher Unwin. 1925. Pp. 88.

[This little book is described by the Publisher on the Wrapper as "intended to supply information and instruction to those who have not read the history of English taxation or followed the twists and turns of fiscal controversy since Mr. Joseph Chamberlain tried to overthrow Free Trade."]

HOPKINS (G. A. J.). Salesmanship. Commercial Travelling and Speciality Selling. London: Cassell. 1925. Pp. 112.

[The author seems to be an adept in the arts which he describes and recommends.]

Indian Cotton Excise Duty. Bombay: Millowners' Association. Pp. 235.

JOHNSTON (JOSEPH). A Groundwork of Economics. Dublin: Educational Co. Pp. 112.

[The author is a Fellow of Trinity College, Dublin.]

KELTIE (SIR JOHN SCOTT) and EPSTEIN (M.). The Statesman's Year-Book for the year 1925. Sixty-second Annual publication. London: Macmillan. 1925. Pp. 1531.

[The recast section on Arabian affairs is a special feature of the sixty-second annual.]

LASKI (HAROLD J.). A Grammar of Politics. London: Allen & Unwin. 1925. Pp. 672.

MILLS (STEPHEN). Taxation in Australia. London: Macmillan. 1925. Pp. 278.

ORWIN (C. S.) and PEEL (W. R.). The Tenure of Agricultural Land. Cambridge: University Press. 1925. Pp. 76.

PARKINSON (H. W.). From Capitalism to Freedom. London: Labour Publishing Co. 1925. Pp. 225.

PILLAI (P. PADMANABHA). Economic Conditions in India. With an introductory note by DR. GILBERT SLATER. London: Routledge. 1925. Pp. 330.

[No. 76 in the series of monographs by writers connected with the London School of Economics and Political Science. The author is a Member of the Economic and Financial Section, League of Nations Secretariat, Geneva.]

PROTECDICOS (D. E.). The Financial Position of Greece. London: Allen & Unwin. Pp. 16.

PURDOM (C. B.). The Building of Satellite Towns. A contribution to the study of town development and regional planning. London: Dent. 1925. Pp. 368. 25*s*.

RAU (B. R.). Present-day Banking in India. Second edition (revised and enlarged). Calcutta: University. 1925. Pp. 311.

ROCKOW (LEWIS). Contemporary Political Thought in England. London: Parsons. 1925. Pp. 322.

SCOTT (J. W.). Unemployment. A suggested policy. London: Black. 1925. Pp. 63.

[The policy suggested is a new kind of town planning. The writer is Professor of Logic and Philosophy at University College, Cardiff, author of *Syndicalism and Philosophical Realism.*]

SMITH (JAMES HALDANE). Collectivist Economics. London: Routledge. 1925. Pp. 216.

SMITH (J. RUSSELL). North America: its People and the Resources, Development and Prospects of the Continent as an Agricultural, Industrial and Commercial Area. London: Bell. 1925. Pp. 849.

SPYKMAN (NICHOLAS J.). The Social Theory of George Simmel. Chicago: University Press. 1925. Pp. 296.

[This study of a German philosopher who died 1918 is written for the purpose of reopening the discussion of methodological problems.]

STEAD (FRANCIS R.). Bankers' Tests. The treatment by bankers of applications for loans, etc. London: Pitman. 1925. Pp. 136.

American.

AUBERT (LOUIS). The Reconstruction of Europe (Institute of Politics, Williams College, Mass.). Newhaven: University. 1925.

BEZANCON (ANNE) and others. Four Years of Labor Mobility. A study of labor turnover in a group of selected plants in Philadelphia, 1921–24. Philadelphia. Pp. 146.

Economic Cycle. Its application to Buying, Selling, Production, Investments. Harvard University: Committee on Economic Research. Pp. 32.

BIDWELL (P. W.) and FALCONER (J. I.). History of Agriculture in the Northern United States, 1620–1860. Washington: Carnegie Institution. 1925. Pp. xii+512.

[This book contains what is probably the best historical review of the agriculture of the Northern United States that has been attempted. Beginning with the earliest efforts of the colonists of the New World, the subject is carried up to the middle of last century. Some useful maps are inserted and a good deal of statistical material.]

BUCK (NORMAN SYDNEY). Anglo-American Trade Organisation, 1800–1850. New Haven: University Press. 1925. Pp. 190.

CHIROL (SIR VALENTINE). The Reawakening of the Orient (Institute of Politics, Williams College, Mass.). New Haven: University Press. 1925. Pp. 176.

[Along with Sir V. Chirol's address on the above subject and on the Indian experiment there are bound up essays on other subjects by other writers on the Labour Movement in Japan by Yusuke Tsurumi, and on economic causes of war by Sir James Salter.]

HALL (HUBERT). British Archives and the Sources for the History of the World War. (Economic and Social History of the World War.) Oxford University Press (on behalf of Carnegie Endowment). 1925. Pp. 445.

[Sources of history made accessible.]

PIRENNE (HENRI). Medieval Cities: their Origins and the Revival of Trade. (Translated from the French by F. D. HALSEY.) Princeton: University Press. 1925. Pp. 249.

Scientific Management. A collection of articles inspired by Copley's Life of Frederick W. Taylor. By IRVING FISHER, IDA TARBELL and others. (Bulletin of the Taylor Society.) New York: Engineering Societies. 1925. Pp. 92.

SECRIST (HORACE). The Bureau of Business Research.

SECRIST (HORACE). Retailers' Original Mark-up on Men's Suits, 1913, 1916–1921. (Bureau of Business Research.) Chicago: Northwestern University, 1925. Pp. 30.

[The amount or percentage which the retailer adds to the wholesale price to cover operating expenses and profit is largely controlled by custom. Fifty per cent. is a common figure for this "mark-up." In years of large volume like 1919, 1920, "mark-ups" were lower than in years of moderate volume. Customary "mark-ups" often necessitate "mark-downs," "sales," etc.]

French.

PIRON (GAËTAN). Les doctrines économiques en France depuis 1870. Paris: Colin. 1925. Pp. 206.

ROUSIERS (PAUL DE). Les grandes industries modernes. III. Les Industries textiles. Paris: Colin. 1925. Pp. 261.

SÉE (HENRI). L'évolution commerciale et industrielle de la France sous l'ancien régime. Paris: Giard. 1925. Pp. 396.

SÉE (HENRI). La France économique et sociale au xviii^{e} siècle. Paris: Colin. 1925. Pp. 193.

German.

BECKMANN (FRITZ). Die Organisationsformen des Weltfunkverkehrs. Bonn: Weber. 1925. Pp. 166.

BURKART (DR. FRITZ). Die funf Grossen Englischen Depositen-Banken (The Big Five). Basle: Helbing. 1925. Pp. 188.

FOŘT (DR. JOSEF). Grundriss eines Währungs-Stabilisierungs Planes. Prague: Lerche. 1925. Pp. 182.

HAHN (ALBERT). Geld und Kredit. Tübingen: Mohr. 1924. Pp. 146.

[A collection of articles published in the *Archiv für Sozialwissenschaft.*]

NUSSBAUM (ARTHUR). Das Geld in Theorie und Praxis des deutschen und ausländischen Rechts. Tübingen: Mohr. Pp. 278.

SCHULZE (ERNST). Organisatoren und Wirtschafts-Führer. Leipsic: Brockhaus. 1923. Pp. 111.

SOMMER (DR. LOUISE). Die Österreichischen Kameralisten in dogmen-geschichtlicher Darstellung. Studien . . . herausgegeben von Dr. Karl Grünberg, XII, XIII). Vienna: Konegen. Teil I. 1920. Pp. 119. Teil II. 1925. Pp. 494.

Italian.

CARLI (FILIPPO). Introduzione alla Sociologia Generale. Bologna: Zamchelli. 1925. Pp. 213.

COLETTI (F.). La popolazione rurale in Italia; sui caratteri demografici, psicologici e sociali. Placentia.

EINAUDI (LUIGI). La terra e l'imposta. Milan: Universita Commerciale Bocconi, 1924. Pp. 173.

[Reprinted from the *Annali di Economia.*]

NITTI (F.). La pace. Turin: Sofetti.

SCHANZER (C.). Sulla Società delle nazioni. Rome.

SERPIERI (A.). La politica agraria in Italia ed i secenti provedimenti.

SUPINO (CAMILLO). Le basi economiche del movimento operaio Milan: Albrigghi.

Spanish.

SUBERCASEAUX (G.). Historia de las doctrinas económicas en América y en especial en Chile. Santiago. 1924. Pp. 143.

THE ECONOMIC JOURNAL

DECEMBER, 1925

THE MEANING OF WAGES[1]

THERE is a growing demand for the formulation of a theory of wages, a theory which shall be easy of comprehension and useful both in support of things desired and in refutation of things detested. Our friends across the Atlantic have set a price upon it; they are offering 5000 dollars for the best original thesis on the subject, and have engaged the services of distinguished men to decide which of the theses submitted on an economic theory has an economic value. Meanwhile laws are passed in this country and others determining and bearing on wage rates, and international wage settlements are under discussion.

It cannot be denied that the formulation of a theory of wages would give satisfaction to economists as well as to others who desire to use such a theory in practical affairs. Early economists essayed the task, but to no lasting purpose. The Iron Law of wages, the Wage Fund theory, with other theories of more or less note, have been placed on the scrap-heap of venerable antiquities, whence they are raked from time to time by those who delight in recognising that it is almost as rare, perhaps almost as difficult, to evolve an economic theory which contains no truth as to evolve one which contains the whole truth. Modern economists for the most part content themselves by explaining how wages are determined under given conditions and commit themselves to no theory. While they give explanations only, other people will, if reverently minded, exalt these explanations into theories, or, if of bolder make, produce theories of their own and pour scorn upon the timidity of academic theorists.

It is as little within my intention as it is within my power to put forward a theory of wages. My business is one of analysis, not of construction, of restatement, not of creation. My purpose is twofold: first, to discuss certain aspects of wages, and then to

[1] Presidential Address before Section F of the British Association, Southampton, 1925.

review from those aspects certain payments made to or on behalf of employees.

Let us then consider three aspects of wages, each important in its way. First, there is the distributive or competitive aspect, from which wages are regarded as a factor determining where labour shall go, who shall command it, in what manner labour of certain types and given efficiency shall be employed. Competition between employers seeking the best workers is expressed in the wage they offer, and competition between workers seeking the best employer is expressed in the wage they accept. This competition tends to bring the wages of workers of equal efficiency to equality and to ensure that the wages of workers of unequal efficiency shall be unequal.

Taken alone this idea of wages treats of the supply of labour as being fixed independently of the wage, and of the wage as powerful only in directing the available supply. It is therefore a short-period consideration, dealing with market price rather than normal value. As in all short-period considerations, stress is laid on the quantitative side, on the notion of value falling with an increase in the supply of labour and rising with a limitation of supply.

Secondly, there is the idea of wage payment which treats of work and wages as completely interdependent, since the product of each worker constitutes his payment. The product of each worker, represented by his wage, makes an effective demand for the produce of other workers. His addition to wealth is his claim upon it. Numbers are important only if with alteration in numbers there are consequent alterations in productive power per head, or if the proportions between the different types of labour required be ill-adjusted.

Finally, we may take the aspect of wage payments which is concerned with their effect on work and on the supply of workers, the wage being regarded as something that maintains the worker.

These three aspects of wages are not antagonistic. It is clear from the outset that there is no contradiction between the first two, between that from which they are regarded as a distributive force and that from which they are regarded as the actual product of the wage-earner. The idea that the worker produces so much wealth and that his work is paid in proportion to the wealth he produces is, indeed, associated with the idea that the demand for and supply of such labour as he has to offer determines its value. Wages so determined are known as "fair" or "normal": fair in that they are equal to those of other workers of similar

capacity, normal in that they are the wages that tend to be paid under conditions of free competition.

Each worker on this reckoning tends to get what his work is worth. It may be worth little. This admission does not apply only to bad workers. It certainly does apply to them, whether the badness of their work be due to bad character, bad health, or bad mental equipment. But the question is not one only of efficiency but of the type of ability and of the number of other workers possessed of that particular type. Men and women may work hard and in their own line efficiently, but there may be so many others working hard and in the same line efficiently that the force of competition may give them a wage low compared with that given for work to which no more effort is devoted but for which the demand is greater in relation to the supply.

Work which is not entirely unskilled may be ill-paid if the numbers competent to do it are great. This is, perhaps, especially the case with women's work. No one can compare the work done in clothing factories in the machinery rooms in which women are employed with some of the work done in the cutting-rooms by men without admitting that the difference in the wage over-estimates the difference in skill.[1] Professor Edgeworth, in discussing the low wages of women workers, gives as a powerful cause of such wages the crowding of women into certain occupations owing to their exclusion from others.

Moreover, dull jobs, monotonous jobs, and unpleasant jobs largely tend to be done by workers receiving low wages. For the most part people receive more pay for amusing jobs, varied jobs, and, up to a point, pleasant jobs, because there are, in proportion to the demand, fewer people able to do these. Those engaged on them belong to fairly high grades, qualities being required which, whether owing to heredity or educational advantages, are comparatively rare. Where the powers are equal it is true enough that any charm belonging to the work will lower the wage. I remember a discussion, initiated by a group of business men on the startling differences between their own incomes and those of professional workers of at least equal ability and more expensive training, being brought to a close by a member of the group saying that he supposed members of the professional classes were paid in self-satisfaction. It is probably true that men and women depress the rates in certain professions simply through their liking for the work. Few would object to rates being lowered in

[1] Economic Journal, December 1922.

this fashion. Those who earn them accept pleasure in their work in lieu of money.

But for the most part earnings are low in occupations that offer no special attractions and are filled by workers who, thanks to heredity, or sex, or environment, have little chance of entering others. The able man or woman has not only the fun of being clever, but the advantage of high earnings through belonging to a grade in which the numbers are relatively small.

Work for which the "normal" or "fair" wage is low may be of great importance. The fact that a man's work is worth little may mean not that those who use his services could readily dispense with such services, but merely that they could readily dispense with him because of the numbers ready to fill his place. The thing done or service rendered by an ill-paid worker may be more essential than the services or products of many better-paid workers, but the relative wage rates in different grades are affected by relative quantities, and every grade contains some workers doing essential and some doing non-essential work.

Workers are not, and are aware that they are not, entirely responsible for being of a particular type, for belonging to a grade in which numbers are great, for having entered an occupation for the products of which demand is small or has fallen. Their parents are responsible for their existence and largely for their early environment; their teachers and the State are largely responsible for their education or lack of education. Human beings do not come into the world in response to economic demand. Human life precedes economic activity, and special talents do not appear in exact and speedy response to the call for them. Hence the normal wage is frequently low for reasons outside the control of the worker.

It is, perhaps, unfortunate that wages which reflect the value of the work done should be known as fair wages. It has already been stated that they are known as fair because they are, if mobility is perfect and competition free, equal to those of other workers of equal capacity and doing work offering equal attractions. It is the equality that has led to the epithet "fair." But it is a not very convincing fairness to the man receiving a low wage whose work is worth little through no fault of his own. For when the demand price sufficient to absorb all the workers in a given grade is small or, in more technical language, when the marginal net productivity of such workers is low, when the workers in that grade are neither bad nor careless, other members of the community gain by cheap goods as the workers lose in low pay.

It is often thought, and it is sometimes true, that it is not the consumer who gains by the low price of labour, but the employer or some intermediary between the worker and the consumer. But whether this be the case or not, the worker sees no essential fairness in the fact that his low wages leave others with a purchasing power greater than they would otherwise possess. It is true, of course, that when he consumes the commodities that he helps to cheapen he gains with other consumers by their plenty, but, since the consumers of a commodity outnumber and are to some extent other than its producers, the gain to the worker is less than the gain to others.

Plenty is generally an advantage to the community. We rejoice if land is plentiful in proportion to the population and rents are low. We should like capital to be plentiful and cheap, competing for employment at a low rate of interest. We are aware also that the owner of a limited supply of a commodity that becomes plentiful loses wealth as the consumer gains it. It is one of the anomalies of economic measurement that when a country becomes richer through an increased supply of certain goods, wealth as represented by those goods may be calculated as being less than before, because of the lowering of this exchange value. Plentiful crops, the discovery of mineral resources, enrich the world, but the value per bushel and per ton is decreased by the very plenty which increases general wealth. The owner of anything other than labour may be compensated, or more than compensated, by the greater amount he possesses. Not so the worker. Each worker is lord only of his own labour. His energy and his possible working hours are limited, and, given that he is using his energy through as many working hours as is compatible with efficiency, it is not in his power to balance the low value of each unit of energy by multiplying it.

Recognition of this leads to limitation of output. There are, roughly, two ways in which men may increase their own wealth: by increasing or by decreasing production; by adding to general wealth so greatly that they command more of it, or by making rare that portion of it which they control. Adult workers who have their youth and their training behind them have little power of doing the first, and fall back on the second. Through limiting output, erecting barriers against new-comers into their trades, they may successfully maintain or raise their own wages. From this point of view the objection of men to opening to women any new branch of industry is perfectly logical. If women be found capable of doing work formerly reserved for men, and are allowed

to do it without let or hindrance, they will tend to have a depressing effect on the wage. Not because of their sex, but because of their number. Their exclusion from many trades makes their entry to any single trade formidable; they are jealously excluded from one type of work because they are jealously excluded from others; thus they come to be considered natural blacklegs.

The erection of barriers swells the numbers of those without and lowers their wages further. It may be said in parenthesis that, from this point of view, all rates of pay for women are abnormal, below the "fair" rate. Excluded from any one occupation, they lower wage rates in other occupations of the same grade, and if by such exclusion they are forced into the occupations of a grade below that to which they would otherwise belong they again lower the wage. If this line of thought be pursued further, it may be concluded that the normal wage of every occupation is constantly interfered with by monopolistic action, whether on the part of employers or employed, in other occupations.

It is not profitable to pursue this subject further without discussing the third aspect of wages, and considering not merely the wage that a man is worth but the wage that he needs. The section of modern economic literature devoted to the dependence of labour on wages on the one hand and to the dependence of wages on the needs of labour on the other, is growing in volume and importance. Wages, in addition to directing labour and being a return of goods and services to labour in exchange for the goods and services it supplies, are expected to maintain the worker. The owner of labour alone among owners of any agent of production is supposed to live on the product of the thing he owns. The economic fact that to a great extent he does so has been exalted, like many another economic fact, into a moral obligation. And when the normal wage is low without discernible fault on the part of those who earn it, the moral obligation is shifted and it is said that the wage ought to be large enough for the worker to live on. No one suggests that landlords ought to live on their rents. We know that some of the larger landlords do and that some of the smaller ones do not, and we are aware, as was suggested earlier, that if improvements in methods of production or transport facilities lower the prices of agricultural produce and landlords' rents it will be more difficult than before for landlords to live on their rents. From the economic standpoint we should care not at all. There would be plenty in the land, and though we might be sorry for individual landlords who had formerly subsisted on their rents, there are many who are capable of saying that it will be

good for landowners to have to do a little honest work. So it is with capital. Certain owners of capital live on their dividends, a fact that many resent. But the bulk of capitalists, those with small savings, do not depend on interest. Their dividends do not make their income, but are an addition to it.

But, it being assumed that the worker lives on his wage, we concern ourselves greatly with the question of how far wages do or can be made to respond to needs. Our concern may take the form of a demand, like that put forward by Mr. Clifford Allen in his Presidential Address to the Conference of the Independent Labour Party in April 1925 for "a universal living wage, dictated by the needs of a civilised existence and not dependent on the varying fortunes of each industry." Or a problem may be presented as in the opening words of the report of the International Labour Office on Family Allowances: "In the determination of wages two somewhat conflicting principles may be detected—'equal pay for equal work' or 'to each according to his needs.'" Or we may find the assumption, as expressed in Miss Rathbone's book on the "Disinherited Family," that needs are an active factor in the determination of wages. Bachelors, she tells us, are enabled by the uniform wage system [1] "at one moment to fight the battle of higher wages from behind the petticoats of their hypothetical wives and children, and the next to claim the wages thus won as their exclusive property." And, in speaking of the jealousy of women felt by the male worker, she writes that this jealousy is [2] "due partly to his well-grounded fear that her lesser family responsibilities will enable her to undersell him." And finally we have the attempts of legislators in setting up Trade Boards and other machinery for dealing with wages, crowned by the Widows' and Orphans' and Old-Age Pensions Bill, which deliberately attempts to make payments in respect of work cover the bulk of the cost of contributions for the maintenance of the worker during old age, of his widow after his death, and of his fatherless children until such age as they be thought competent to maintain themselves.

We are challenged daily, by proposals for minimum wage rates, cost of living standards, family allowances, contributory insurance schemes, to consider the connection between the normal wage and a wage adjusted to the needs of the worker. The question is a complicated one. Marshall writes [3]: "Wages tend to equal the net product of labour; its marginal productivity

[1] *The Disinherited Family*, Eleanor Rathbone, p. 56.

[2] *Ibid.*, p. 48.

[3] *Principles of Economics*, Marshall, Book VI. ch. ii. § 3.

rules the demand side for it; and on the other side, wages tend to retain a close though indirect and intricate relation with the cost of rearing, training, and sustaining the energy of efficient labour. The various elements of the problem mutually determine (in the sense of governing) one another; and incidentally this secures that supply price and demand price tend to equality."

It is far easier to see the connection between the wage and "training and sustaining" the worker's energy than between the wage and the "cost of rearing" the worker. If labour be not adequately sustained during the period for which the worker is engaged the product will suffer. Diminution in the number of workers available, or in efficiency, or both, follows swiftly on lack of sustenance. Further, the wage must bear some relation to the cost of training, since so long as there are occupations which demand no training, or less training than others, those needing most will lack recruits if the earnings they offer are not relatively high.

The cost of rearing the worker raises different questions. It is clear that the individual worker does not pay for his own childhood; no bill of the cost is presented to him when he begins to work. It is equally clear that the childhood of most wage-earners is paid for from wages; part, and a considerable part, of the wage of many workers is devoted to the maintenance of their children. It may be said crudely, therefore, that unless wages cover the cost of rearing workers there will be no workers. It cannot, however, be asserted that because a worker pays certain expenses from his wage those expenses are the cause of his wage, or of any part of it.

There is a tendency to assume that, while the efficient sustenance of labour during working days and hours is a prime cost of industry to be covered by the wage, sustenance in non-working days and hours, in sickness, during unemployment, in old age and the maintenance of wife and children not only during but after a man's working life, is a kind of supplementary cost for which provision should be made in respect of work done. This presupposes a vast amount of calculation both on the side of the employer and the employee.

First let us take the employee, as being the party to any wage contract most likely to reckon such costs. Here, roughly, we find workers divided into the calculating and non-calculating classes, those who expect security and those who do not: an expectation which probably makes a far sharper class distinction than that made by riches and poverty. "Calculating the future" is an expensive and harassing occupation, generally

indulged in on an extensive scale only by the comparatively well-to-do, including those whose high productivity and, again comparatively, rare gifts have secured high earnings. The supposed security of those who draw their incomes entirely from rents and interest, rudely as that security has been shaken from time to time, has been accepted as an ideal by many able to afford it through high earnings of hand and brain. Arrangements for contributory insurance schemes have long been common in the professions. Civil servants are accustomed to compulsory schemes. Compulsory schemes have been accepted by section after section of the teaching profession. They are under discussion for the clergy. The Local Government and Other Officers Superannuation Act of 1922 covered members of the medical profession working under local authorities, and a scheme which would apply to all doctors on the panel is being mooted by some of the doctors concerned. Contributory insurance schemes for the provision of pensions have, with the exception of some of the less exalted branches of the Civil Service, in the past been made compulsory among those classes who before their introduction attempted to make similar provision voluntarily.

The same classes have perhaps more than others calculated the number of children whom their earnings would maintain. The fertility statistics of the last census show that the professional classes, who are very largely the calculating classes, have a lower fertility rate than any other occupied section of the community: ·90 being the average number of children under sixteen for married men in the professional classes as compared with 1·27 among all married men.

These classes who calculate the future are but a small section of the community. For most earners the exigencies of present maintenance exclude considerations of future maintenance. With dependents the case is somewhat different; more and more every class of the community tends to consider the possibility of making good provision for its children, and more and more do the parents of every class recognise that they can provide for their own needs by limiting the size of their families. The importance of both considerations is enhanced by the raising of the school-leaving age. The first consideration reacts on the health and efficiency of the children and stimulates the activity of the parents, while both tend to lessen the number of children.

The effect on earnings of calculations made by the worker, either for his own future and that of his dependents or for the present needs of his dependents, is not easy to trace. A stimulus

to activity which in effect raises the wage-earner to a higher grade, increasing his productivity and general wealth, makes him worth a higher wage. A limitation of numbers is slow in its action on supply, and, since it cannot be assumed that each grade or occupation is entirely self-recruiting, no positive result can be ascribed to it, except in so far as it is thought that a general increase or decrease of population is likely to cause a general rise or fall in wages—a question round which controversy has raged for the last and is likely to rage for the next century. It may be assumed that a limitation of numbers in the lowest grades would have a beneficial effect on wages, but it appears that even this form of calculation works less strongly in such grades than it does in higher ones.

Before further considering the effect of calculations made by the workers on wages, it will be well to turn to the question of how far such calculations affect the employer, purely from the business point of view. The employer is concerned to pay such a wage as will, within the limits of his vision, keep his firm effectively staffed. His range of vision will extend over sickness as well as health, even over some unemployment as well as employment, according to the need of his particular firm for employees who know their job and the firm. But, apart from philanthropy, it will not extend forwards to the period in which men cease to work for him, any more than it will extend backwards to the period in which they have not begun to work, save in so far as a higher wage is needed to induce parents to pay for the education or training appropriate to the particular work. Nor, again apart from philanthropy, will it extend to the sustenance of children, save in so far as it appears that lack of sustenance for the children leaves the workers without sustenance to an extent which reacts on their efficiency. This is likely to happen only amongst the most ill-paid workers, ill-paid because of the number of others ready to replace them; therefore such a reaction on wages is not likely to be very powerful. The children of the worker may, of course, be the future recruits of the firm to which their father belongs, but there is no certainty about this. In some cases, as in the mining industry, where families are relatively large but where male labour only is needed, some of the children will necessarily be of the wrong sex. For, as Cobbett ruefully remarked, " where there be men and boys there will also be women and girls."

The upshot of this discussion of the effect of calculations relating to old age and dependents is that for the most part where they have been made voluntarily they have been the effect rather than

the cause of high earnings, and that, apart from the more immediate needs of labour, normal wages are not adjusted to cover them. Employers have not reckoned the whole of the worker's life or the maintenance of his dependents as an overhead charge. They do not pay adult male employees at a high rate because they have families dependent on them or because they must make provision for the future, but because their productivity is relatively high and because they are strong and experienced workers. They do not gravely reckon the average family of an average worker, they reckon what the man's work is worth.

Nor do the needs of the worker provide him directly with additional bargaining power. It has generally been recognised in foreign trade that needs are a weakness and not a strength in bargaining. It is the same with the worker. As far as fighting strength goes, bachelors who are without dependents can fight more effectively than men with families. And the mere acquisition of a new set of needs, unless it stimulates activities and so is part of a higher standard of life, adds to misery and not to wages. To a certain extent it is notorious that dependents do stimulate activity, married workers being generally steadier and more regular than unmarried ones. Their higher productivity raises their earnings. But it is to be feared that bargaining power is in no way enhanced by the number of dependents, and everyone can call to mind cases of men who dare run no risk of losing their job because of their wives and children.

In view of this, we may think it fortunate that some workers who get low wages have few needs. Young untrained workers whose productivity is low have no dependents. They have often, in fact, just ceased from being dependents themselves and become contributors to the family wage. If women are crowded into a somewhat small number of occupations with low rates of pay, it is some comfort to remember that they have comparatively few dependents to suffer from those low rates.

If we agree that the normal wage in some cases rises above and in many falls below the wage required by the worker for his maintenance in the future as well as the present and for the maintenance of his wife and family in both the present and future, what should be our attitude towards the many persons and bodies who are concerned with raising the wage rate, with charging provision for unemployment and the future on to wages, and with readjusting wage rates? Measures concerned with wages may be put into three categories roughly coinciding with the three aspects of wages with which we began. First, there are those which are concerned

with the mobility of labour, with seeing that labour is as swiftly as possible directed where it is most needed, by the dissemination of knowledge, by facilities for movement such as are offered by the Employment Exchanges, by vocational selection, by the efforts of Trade Unions to ensure that in every instance the rate received shall be at least the normal rate. Secondly, there are those which attempt to increase the productivity of the worker and raise him from one grade to another; such as measures of educational reform, improved social conditions, even, when wages are very low, minimum wage rates which by improving the health of the worker increase his productive capacity. Thirdly, there are measures which attempt something further and try either to add to the normal wage rate or to "stretch" the rate so that it will pay for things that it did not previously pay for. I do not propose to discuss the first two categories. Their value is obvious.

But we are being forced increasingly to discuss the third category. It includes schemes for fixing such minimum wage rates as do not increase productivity: cost of living standards when they attempt something other than the maintenance of the normal wage; schemes for subsidising certain sections of wage-earners, such as the Family Allowance system; and schemes for stretching normal wages to cover certain costs, such as compulsory insurance schemes.

Where these schemes ensure a given rate of wages their advocates desire that it should be secured without unemployment ensuing. They do not wish either to raise the wages of the individual at the expense of his earnings or to raise his earnings at the expense of the employment of other workers. Where, as in compulsory and contributory insurance schemes, a charge is levied on employer and employed, it is presumably not desired that unemployment benefit should be provided by measures which, by making labour costs high, increase unemployment, or that hypothetical widows and fatherless children should be provided for by schemes which, by reducing wages, stint actual wives and children whose fathers are living.

Minimum wage rates may be maintained without unemployment following when, as has already been suggested, through their reaction on efficiency they increase the value of the work done, and also where the demand for the labour employed is inelastic. Trade Boards have proved this. And it may further be argued that, when normal wages are too low to provide adequate maintenance for all workers belonging to a given grade, it is better to enforce a wage adequate for the maintenance of a certain

number, and, having so produced a certain amount of unemployment and defined the problem, take steps to deal with the unemployment. It may be better to have eighty or even fifty per cent. of workers of a given grade adequately paid and the remaining twenty or fifty per cent. unemployed, than to have a hundred per cent. inadequately paid.

When the question is one not of the minimum needed for efficient sustenance but of the relative rates in different occupations, according to the degree of skill required and the customary rates for work of a given kind, the problem becomes different, as in the case of cost of living standards. There is nothing sacred about relative wage rates; they are exceedingly arbitrary as between different occupations and between different types of skill in the same occupation. Wage rates normal in the past are not normal in the present and will not be normal in the future. They are subject to infinite variations in accordance with the changes in demand (including changes in the scale of the market), changes in the structure of industry, and the progress of invention. The alterations in industry which took place during and immediately after the war must have been as bewildering for the unskilled labourer in this country, who found himself better off in 1922 than in 1914, as for the skilled labourer who found himself worse off.[1] It was not unnatural that in the case of the second bewilderment should be accompanied by resentment and succeeded by efforts to restore the former balance. But the balance is mobile and cannot be stereotyped. It is a pointed commentary on this fact that the Cave Committee reporting on the Trade Board Acts in 1922 advised that the Boards should in future confine their activities to the settlement of wages when such wages are unduly low and no other adequate machinery exists for their effective regulation. The report further deprecated the attempt to fix a national minimum wage for all trades, on the ground that it raised[2] "highly controversial questions, not only as to the principle upon which a general minimum wage should be based, but also as to the relationship of men's and women's wages, the provision to be made for dependents, and the possibility of distinguishing between district and district." This report and consequent legislation marked the abandonment of one attempt to legislate on relative wage rates. But if one attempt was abandoned, others remain. The minimum wage rate in the coal-

[1] *Manchester Guardian Commercial*, October 1922.

[2] Report to the Minister of Labour of the Committee appointed to inquire into the working and effects of the Trade Board Acts, 1922.

mining industry is being hotly discussed and, apart from legislative enactments, cost of living standards as a basis not for wages but for fluctuations in nominal wages are commonly enforced by Trade Union action. In so far as such standards are adjusted to meet changes in the general price-level due to fluctuations in the quantity of currency they tend to restore and maintain the normal rates of real wages; but when they are adjusted to meet changes in the general price-level due to an increase or decrease in the production of wealth, or to maintain for as many workers as before in a given occupation the standard of living formerly enjoyed by its members when the conditions of or demands for their work have changed, the position is different. If, for instance, the price-level falls because there is greater production in the country, there is no reason why the worker should not share in that increased wealth by retaining at least his former nominal wage, and so be enabled to raise his standard of living. It is also to be feared that the better-paid workers at least should share in the lessened wealth which is represented by a higher price-level when prices rise because wealth is scarce. Finally, with changing conditions the relative numbers of workers required for work of different types will vary, and if the relative wage rates may not vary labour will not be discouraged from entering occupations where it is not needed or encouraged sufficiently to enter those in which the demand for it has increased. This may lead to an increase in unemployment, acting in the same way as mistaken investments of capital in attracting labour to and locking it up in industries in which it cannot be absorbed at rates equivalent to those paid for similar labour elsewhere.

This is well-trodden ground, from which we may pass to the disputed fields of subsidies, allowances, and contributory insurance schemes. For a wage which is "above the normal" is in effect a subsidy given to the worker in respect of a particular type of work. In a sense, nomenclature matters little. We tend to call anything a wage which is given by an employer to a worker, and to call anything a subsidy which is given to a worker or an industry or anyone or anything else by the State, and to dub as taxes revenue collected by the State. For practical purposes this is a convenient definition. But when we come to analyse payments above or below normal wages, we find that we are generally tracing their incidence and dealing with transferences of wealth rather than with costs.

There is little disguise about the "tax and subsidy" nature of the family allowance system. Bachelors are to be taxed, or

to tax themselves, for the sake of men who have families. It is recognised that it is on the whole unwise to put the administration of the "tax and subsidy" in the hands of the employer, lest he should mistake a tax and subsidy scheme for a new wage system under which it would be greatly to his advantage to employ bachelors rather than married men. Once it is frankly admitted that large families neither force nor enable employers to pay high wages, we can if we wish settle down to a discussion of the ethical and economic advantages of family endowment. And we can contrast the advantages of making provision for families within each industry separately or through a more general scheme of taxation. If the bachelors are more willing to pay the tax when they see their comrades and their comrades' children benefiting, the first method has at least one great advantage. On the other hand, there are advantages in extending the area of the tax to bachelors not engaged in industries providing subsidies, and even to some who are not bachelors. There is much to be said from the point of view of the revenue in favour of taxing those who are without dependents far more fiercely than they are taxed at present, but the policy of earmarking taxation is always a somewhat doubtful one, as earmarked contributions may be less or more than is needed to cover the cost of the object for which they are earmarked.

From the suggestion to tax certain wage-earners for the benefit of other wage-earners we may pass to the practice of taxing wage-earners for their own benefit, as embodied in unemployment and health insurance schemes, in the various pension schemes already adopted in the Civil Service and as proposed in the Pensions Bill. It may be said that here we are not dealing with taxation but merely with deferred pay; that the contributions, covering as they do the workers' own risks, are a forcible method of saving, but cannot fairly be called taxation. This is perfectly true when the saving would or could be made voluntarily. Indeed, when a compulsory savings replace voluntary savings the worker may gain in earnings, since the compulsory scheme may contain a contribution from the Exchequer and large-scale insurance is cheaper than small-scale insurance. But when wage-earners are too poor to save, enforced saving leaves them for the time being poorer than before, and Mr. Neville Chamberlain's hope that the Pensions Bill[1] "would encourage people to try to add to the benefits and thus achieve complete independence for themselves" is likely to be frustrated by the reduction in their means. We are

[1] *The Times*, May 19, 1925.

agreed that the benefits of these schemes must be secured. We are probably agreed that they must be augmented. But the provision of future benefits by taxes on present wages may not be the best method of giving such benefits when wages are low. The wage may be too small to be deferred. Nor does the fact that employers pay a larger proportion when the wage is exceedingly low help those who are on the verge of unemployment and may by this arrangement be pushed over it.

It is to be feared that if normal wages be not adequate to cover calculations for the future, contributory schemes, however advantageous, may make things more difficult than before for workers belonging to a grade in which numbers are great in proportion to demand. It cannot be assumed that the demand for labour within this grade is inelastic. In many instances it may be, as when labour paid at a low rate is employed in co-operation with better-paid labour and in industries in which its cost is but a small proportion of total cost. But frequently the demand is elastic, as in agriculture, where we are constantly told that labour cannot profitably be employed even at minimum wage rates which seem to many of us less than moderate.

Contributory insurance schemes have occupied much attention lately, probably more than they deserve. The contributions demanded by each individual scheme are no great matter; even taken together they do not amount to a vast charge per worker. But, small as they are, they are of interest as being attempts to stretch the normal wage to meet the needs of maintenance when, in terms of that wage, the worker is not always worth a rate which will enable him to meet all the demands made upon him for his own immediate support and that of his family.

The normal wage is defiantly rigid. It is also brutally erratic. It will not be stretched to meet any but the most immediate needs of workers in low grades; it is capable in times of depression of falling below even that low standard. In the process of asserting itself it drives men ruthlessly from occupations for the products of which demand has fallen. The secret of its mastery lies in the fact that it offers the one price at which all labour of any given grade can be absorbed in the occupations to which it is admitted. Whatever be the rights of the coal dispute, it is true that a point may come at which any industry or any single firm in an industry may be unable to pay a living wage to all those occupied in it; a point at which, to quote the Court of Enquiry, the "economic" wage does not yield a "social" wage. The normal wage commonly offered in other occupations for the same

grade of labour will only be given in such an industry when enough men have left it to make the rate even throughout the grade. In the meantime labour may suffer greatly, and the productive power of all industry may suffer, since nothing is so destructive to a man's capacity or more likely to force him into a lower scale of labour than a prolonged spell of unemployment.

There are those who hope that in time the normal wage may in all ranks of labour be at least adequate to maintain workers and their families through all uncertainties and vicissitudes. They believe that the progress of invention will immensely increase productivity; that improved business methods on the one side and rising standards of work on the other will make each worker more productive; that ultimately education will raise all workers to the ranks of those whose work is worth much. But until that Utopia arrives it is well to recognise that, except by making wages abnormal, we cannot at present expect them in all cases to do what is required of them. The normal wage may be subsidised, either by additions to it by the State with all the attendant difficulties, or by Trade Union action, effective where demand is inelastic, in making the consumer pay a tax in the form of a higher price for the products of labour. Monopolistic action limiting entries to a trade or limiting output, beyond the point at which such a limitation is important for the health of the worker, may raise the wage payments above what is normal, but at the expense of making them abnormally low elsewhere in the first case and making the country poorer in the second.

It is blindness to pretend that the normal wage must necessarily provide for all needs, or that the worker is necessarily to blame if it does not. Those more fortunately placed among the workers, as well as among other classes of the community, often gain by the cheapness of the goods made by workers whose work is worth little because their numbers are great. But the community as a whole does not gain because the workers receiving low wages are part of the community.

It is roughly true that the normal wage distributes labour well through distributing wealth ill. Redistribution of wealth is therefore held to be necessary. Redistribution in the name of wages tends to interfere with the distribution of labour. Yet, partly because the name is honourable, partly because some believe wages to be docile and plastic, redistribution under this head is popular. Normal wages are expected to meet expenses not calculated in their payment, while payments not related to the value of the work done bear the name of wages.

LYNDA GRIER

THE ECONOMIC LAG OF AGRICULTURE

I. Introduction

In passing from statics, the study of forces in equilibrium, to dynamics, the science of matter in motion, we enter a new region where time is of the essence of the problem. This is true both in the first simplified formulation of the subject and also when complicating factors, such as friction or viscosity, are brought into a more complete account.

Somewhat similar phenomena appear in economics. When we pass from the classical theories of economic equilibrium to the study of the actual movements of an industry at work, we find that time is an essential factor. Let us take an extreme example. Owing to inertia and their long natural period of vibration, the ocean tides are always in opposite phase to the forces which cause them. And so, owing to economic inertia, economic changes may for a time proceed in what seems the wrong direction. Moreover, the secondary, disturbing factors in economics are more complex and difficult to calculate than in dynamics, for they include the elusive element of human psychology.

Of all time factors, few seem more important than the economic lag between expenditure and receipts. Its financial effect depends on the nature and customs of each particular industry. The builder of a house or a ship signs a contract at a given figure, and any subsequent fall in price of his materials works in his favour, while a rise is against him. A shipbuilder probably insures against a serious rise by arranging an option to buy iron and steel forward before signing his contract, though it must be difficult to eliminate all risk in this way.

On the other hand, a farmer, or anyone else who produces first and takes the chances of his market afterwards, finds the economic lag of his industry tending in the opposite direction. He gains by a rise and loses by a fall in prices. Moreover, in these industries no mechanism of insurance against a change in price seems available.

The farmer, especially the arable farmer, suffered severely during the few years of falling prices from 1920 to 1923, and it is generally recognised that his losses were largely due to the slowness of his "turn-over." But no attempt has been made to

place this knowledge on a quantitative and scientific basis, to adjust curves of prices and costs to show its effect, or to consider its full bearing on national agricultural policy. No attempt, indeed, seems to have been made to investigate the economic lag for any industry, though it has a direct bearing on general economic theory.

The following paper deals with the problem in the case of agriculture, different types of farming being studied as examples. The full details of the agricultural calculations will be found in the *Journal of the Royal Agricultural Society*.[1] The present account is restricted to matters of economic interest.

The results are best set forth by means of diagrams, as on pages 546 and 551, in which curves are drawn to trace the variation with time of the average price of (1) a farmer's products, and (2) his purchases and other costs. Price p and cost c measure the rate per unit time of receipts r and expenditure e respectively. Hence, for a time dt, so short that p and c are sensibly constant, we have $dr = p\,dt$ and $de = c\,dt$. For a finite time t, the total receipts and expenditure are measured by $\int_0^t p\,dt$ and $\int_0^t c\,dt$, that is by the areas under the curves of prices and costs as bounded by vertical lines through the points corresponding to the beginning and end of the time. Profit, the difference between receipts and expenditure, is therefore represented on the diagram by the difference of these two areas, that is by the area between the curve of prices and the curve of costs. To investigate the effect of economic lag, the curve of costs must be shifted to the right by an amount representing the lag so as to bring the points showing the price of produce and the cost of growing it into the same vertical line.

If a farmer's costs were spread evenly over the farming year, from an autumn sowing to harvest, and the produce were sold at the following Christmas, the costs would begin at fifteen and end at three months before sale—an average lag of nine months. In practice, of course, the outlay occurs at irregular intervals and in differing amounts. Taking any one crop, the average number of months before sale of each item of expenditure, multiplied by its fraction of the whole costs of production of the crop, gives its weighted lag. The sum of the weighted lags for each item of expenditure gives the economic lag for the crop.

It is clear that the whole rotation of crops must be brought into account. Thus with a four years' rotation—roots, barley, grass or clover seeds, wheat—the benefit of the cleaning culti-

[1] Volume 85, 1924, p. 122.

vations for the root crop, and sometimes of its unexhausted manure, have to be spread over all the four years, and divided in right proportions between the roots and the three succeeding crops. This has been done in accordance with the values accepted by the Institutes of Agricultural Economics.

II. The Calculation of Economic Lag

The calculations for two kinds of produce—barley and milk, which happen to be the most important on the farms chosen for study—may be considered as examples.

1. *Barley*

On an arable farm with a four-course rotation of roots, barley, "seeds" and wheat, some of the roots (turnips, swedes, etc.) will be fed to sheep where they grow; others (mangolds or sugar-beet) may be carted away to a clamp or for immediate sale. These two methods of procedure differ not only in their result on the economic lag of the root crop, but also on the lag of each succeeding crop in the rotation. If the crop be carted away, it absorbs all the manure used. If it be fed to sheep on the ground, this manure is replaced by the sheep-dung, which is considered to be of equal virtue. All the manurial value has then to be carried forward to the other crops.

Taking barley as an example, we must begin our consideration three years beforehand, when the ground is being prepared for wheat. Perhaps ten loads of farmyard manure are then spread on each acre of the ground: 50 per cent. of the value of this dressing is credited to the wheat, 30 per cent. to the roots, and 20 per cent. to the barley. Thus part of the costs of the wheat year are carried over to the barley crop, and consequently an appropriate fraction of the rent and rates paid in the wheat year has also to be brought forward. A year later the land is occupied by roots, and cleaned of weeds by tillage operations. The value of this cleaning, with probably a second dressing of manure, has again to be apportioned. Finally, the costs of ploughing, sowing, harvesting and marketing the barley crop itself have to be dealt with, and the remainder of the rent and rates charged. Thus the total costs and lag work out somewhat as follows (see p. 539).

2. *Milk*

In dealing with milk production we have to consider conditions differing somewhat in grass and arable countries. The details given below refer to a grass farm.

The costs are divided into two groups, the cost of feeding and otherwise supplying the existing dairy herd, and the cost of rearing the number of calves needed to replace old cows drafted out. Let us take the rearing first. That part of the food which is home-

Years before sale.	Crop then grown.	Expenditure.	Cost in shillings.	Lag in months.	Weighted lag.
		(*a*) BARLEY FOLLOWING ROOTS CARRIED OFF THE FIELD.			
3	Wheat.	Farmyard manure, 10 loads, 60*s*.; carting and spreading, 15*s*. Total, 75*s*., 20 per cent. . . .	15	39	4·1
		Rent and rates, 30*s*., say $\frac{1}{12}$	2·5	32	0·6
2	Roots.	Cleaning tillages, $\frac{1}{2} \times \frac{2}{3} \times 51$	17	24	2·9
		Manures exhausted . .	—	—	—
		Rent and rates, 30*s*., say $\frac{1}{15}$	2	16	0·2
1	Barley.	Ploughing	15	14	1·5
		Seed, 20*s*.; cultivations, 5*s*.	25	9	1·6
		Harvesting and thatching .	22	4	0·6
		Threshing and marketing .	18	1	0·1
		Rent and rates, 30*s*., $\times \frac{17}{20}$	25·5	4	0·7
			142·0		12·3
		Manure correction (explained below)			0·3
					12·6
		(*b*) BARLEY FOLLOWING ROOTS FED ON THE FIELD.			
3	Wheat.	As above. Manure . .	15	39	3·2
		Rent and rates . . .	2·5	32	0·4
2	Roots.	Cleaning tillages as above .	17	24	2·3
		Farmyard manure, 8 loads, 48*s*.; spreading, etc., 12*s*. Total, 60*s*., 50 per cent. .	30	24	4·0
		Artificial manure, 15*s*., 50 per cent. . . .	7·5	20	0·8
		Rent and rates, 30*s*., × [illegible] .	12	16	1·1
1	Barley.	Ploughing	15	14	1·2
		Seed, 20*s*.; cultivations, 5*s*.	25	9	1·3
		Harvest, etc. . . .	22	4	0·5
		Threshing, etc. . . .	18	1	0·1
		Rent and rates . . .	15·5	4	0·3
			179·5		15·2
		Manure correction			·65
					15·85

Corrected mean lag of barley crop, 14·3 months.

grown is itself subject to lag, and this lag must be added to the time before the calf becomes a heifer in milk. (First table on p. 540.)

Now let us consider the running costs of the dairy. With a total of 42 cows, at any time, an average of 7 cows will be dry or suckling calves, leaving 35 in milk. 9 calves must be reared each year to maintain the dairy. (Second table on p. 540.)

The milk produced one month is paid for during the next, so the lag is only 1·0 month. Rent, not due for six months and probably not paid until May and November, has a negative lag.

	Cost in shillings.	Food lag.	Milk lag.	Total lag.	Weighted lag.
Calf. First month, milk and extras	35	6·0	30	3·6	2·79
Rest of first year's food .	100	5·0	24	29	6·43
Labour, rent, rates, etc. .	80	—	24	24	4·57
Yearling. One year's grazing .	156	4·0	12	16	5·53
Heifer. Six months' grazing with extra food . .	80	4·0	3·5	7·5	1·33
	451s. = £22 11s.				20·65
Correction for manure which enters into the lag of home-grown food					·15
Corrected lag of rearing					20·8

We must now combine the results. Of the total costs, £875 has a lag of 4·60 months, and £203 a lag of 20·8. Properly weighted, these give a combined lag of 7·65 months.

	Cost in £.	Food lag.	Milk lag.	Total lag.	Weighted lag.
Dry and suckling cows. Four in winter, three in summer. Food	33·7	4·0	2·5	6·5	·25
Charge the four with labour, rent and rates	10·3	—	−1·0	−1·0	−·01
Cows in milk (35) food at 6s. week	546	4·0	1·0	5·0	3·12
Extra labour of cowman 1s. 6d. per cow per week . . .	136·5	—	1·0	1·0	1·56
Labour, rent, rates, etc., in winter	148	—	−2·5	−2·5	−·42
	874·5	Lag . . .			4·50
Cost of rearing nine calves. .	203	Correction . .			·10
Total costs . .	£1077·5	Corrected lag of dairy			4·60

When milk is produced on an arable farm, the cost of rearing calves seems rather higher, and the home-grown food has a higher lag. The effect of these differences is to make the final economic lag 8·2 months instead of 7·65.

3. *Corrections*

Calculations carried out by similar methods give the crude economic lag for the other kinds of agricultural produce. The results are given below in Tables III and VI, and will be seen to vary from 3·9 months for pigs on grassland to 17·7 months for bullocks fattened on an arable farm.

This crude lag is subject to two corrections. The first depends on the perpetual cycle of agricultural work. A value has to be assumed for farmyard manure spread on a root crop or on the ground cleared of "seeds" before it is ploughed in preparation for winter wheat. The value depends on costs of production incurred some time before and is itself subject to economic lag.

The correction varies from 2 to 8 per cent. for different arable crops. For live stock it only applies to the home-grown food, and is therefore only a quarter or a third of these values. It may perhaps be argued that there is a lag of some three months in producing farmyard manure, which will itself be subject to a similar error, so that we shall get a correction of a correction, and so *ad infinitum*. Luckily, these corrections form a convergent series. Eight per cent. of 8 per cent. is but little more than half of 1 per cent. of the original, and for our purposes is quite negligible, and so *a fortiori* are corrections of higher orders. We may rest satisfied with our first adjustment.

When this correction is applied, we get the normal economic lag for times when no great change in costs is going on.

But, when prices change rapidly, a second correction is necessary. The costs when incurred may be either higher or lower than they would be at the time of sale. This will affect the fraction of the total cost to be charged to each operation, and thus alter its weighted lag.

The correction may be investigated mathematically on the assumption that work is carried on regularly over the whole time of cultivation, so that the normal economic lag is half that time, Of course this is not justifiable for any one crop, but, when applied to the complete working of a farm, it will give a fair indication of the effect of changing prices on the average economic lag.

If prices of supplies and other costs of production are constant throughout the time of cultivation, the total cost, c, is proportional to the time t, or

$$c = at,$$

where a is a constant, measuring the price, and c is given by the rectangular area under the horizontal price line of a costs diagram.

If, on the other hand, the price changes at a constant rate, b, as time goes on, its value will rise from a to $a + bt$ in a time t, giving an average price of $a + \frac{1}{2}bt$. Thus, for the area measuring the total cost, we must write

$$c = at + \tfrac{1}{2}bt^2.$$

Hence $$dc = (a + bt)dt.$$

Now, dl, the weighted lag of each operation, may be taken as the product of the time and the element of cost, dc, or

$$dl = tdc.$$

The whole weighted lag is found by integrating this expression, and the average economic lag, l, by dividing this integral by that giving the total cost. It will be seen that here we divide once for all after addition, instead of for each item of cost as in the tables: the result is, of course, the same.

We get

$$\begin{aligned} l &= \int_0^t tdc \div \int_0^t dc \\ &= \int(at + bt^2)dt \div \int(a + bt)dt \\ &= (\tfrac{1}{2}at^2 + \tfrac{1}{3}bt^3) \div (at + \tfrac{1}{2}bt^2) \\ &= \frac{\tfrac{1}{2}a + \tfrac{1}{3}bt}{a + \tfrac{1}{2}bt} \times t. \end{aligned}$$

This gives the economic lag of a farm if the cost of cultivation per month is a, and the rate at which the cost is changing per month is, at the moment, b.

Now to take a practical example. Let us imagine that costs are changing at a rate of 1 per cent. per month, or 12 per cent. per annum. Then $b = \frac{a}{100}$, and, for a year, $t = 12$, so that $bt = \frac{12}{100}a$.

Hence we find that $l = \frac{54}{106} \times 12 = 6{\cdot}11$.

If there had been no change in prices, the average economic lag of cultivations carried out evenly over twelve months would, of course, be six months. Hence the effect of the change of 1 per cent. per month in prices is to cause a change of 0·11 in 6, or 1·8 per cent., in the economic lag. From this the effect of other rates of change in costs can easily be calculated, and a costs curve be corrected from point to point.

III. Application to Different Types of Agriculture

Having investigated the normal economic lag for different kinds of agricultural produce, and the corrections which must be made to the crude values, we can apply the results in the study of any one type of farm.

Agriculture differs so profoundly in different parts of the country and on different kinds of soil that it seems useless to consider it as a whole. But no one observer in a limited time can

deal with every type. I have therefore studied two farms representing strongly contrasted practice—an arable light land "sheep and corn" farm in East Anglia, and a grass dairy farm, mostly on heavy clay, in the west of England.

From the operations on these two farms from Michaelmas 1923 to Michaelmas 1924 the distribution of the total cash receipts and expenditure among several items was determined. Then the total economic lag of each farm was calculated.

No use has been made of the actual figures of profit and loss on the individual farms. Such figures depend on too many accidental factors to be of much value. It was thought better to trace the effect of prosperity and adversity by taking the percentage increase in prices over those of 1911–13 from the official returns, and calculating the effect on the receipts and expenditure of an ideal farm. Results are thus obtained which do not depend on the skill of an individual farmer, the luck of the local market, or the vagaries of the English climate at one spot, but do fairly represent the unalterable economic factors which every farmer has to face.

It should be pointed out that the present inquiry is not concerned with changes in stock-taking valuations. Such changes are, of course, responsible for a very great appreciation of capital assets during the years 1914 to 1920, and a more sudden depreciation of large, though not equal, amount from 1920 to 1923. These changes as they occur are rightly brought into a farmer's complete profit and loss account, though they do not affect his cash position. But, in this paper, we are dealing with cash trading accounts only.

IV. East Anglian Arable Farming

The first of the two farms to be considered in detail is a typical East Anglian light land farm, where barley is the chief product. Sheep, cattle and pigs are also bred and fattened, and a little sugar-beet is now grown.

The total area is between 600 and 700 acres, of which less than 16 per cent. is under permanent grass. The number of men working per 100 acres is 3·69. The farmer himself is reckoned among these men. In 1923–4 the total sales amounted to £7 19*s.* per acre, and £215 per man working on the farm.

The percentage of the total sales in 1923–4 contributed by each commodity is given in the second column of Table I. The succeeding columns show the effect of the rise and fall in prices during the years 1914–24 as given by the official returns of the Ministry of Agriculture.

Table I

Percentage Increase in Prices of Produce from an Arable Farm compared with the Average of the three years 1911–13.

	Percentage of sales.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
Wheat . .	7·2	7	62	79	132	123	123	147	119	46	40·5	52
Barley . .	42·4	−4	31	86	128	108	167	215	84	41	34·6	65
Oats . . .	2·0	5	52	68	151	149	164	187	72	47	43·2	38
Cattle . .	10·1	6	36	58	105	111	132	163	127	63	51	53
Milk . . .	5·8	8	17	57	91	151	200	203	163	79	75	70
Sheep . .	14·4	13	30	37	97	110	130	187	117	100	87	87
Pigs . . .	5·0	6	29	67	126	166	176	230	128	87	65	37
Hay and Straw (Hay) . .	3·9	−23	6	52	57	87	157	192	51	40	30	1
Mangolds, Sugar-beet, etc. (Vegetables) . .	9·2	8	24	54	138	157	157	119	146	96	48	65
Totals weighted for percentages of sales . .	100·0	1·7	31·6	72·1	117·9	119·6	155·9	190·6	106·5	61·7	49·2	61·9

We have now to turn to costs of production and treat them in the same way as we have done the receipts.

It would be desirable for the sake of completeness to reckon separately the charges for railway and other transport, which are now included in the various items of these costs, and adjust some of the receipts which are also affected by transport charges. This would be easy to do in the case of, say, feeding stuffs and artificial manures, but transport charges enter into such things as the cost of labour, and the receipts from the sales of grain, in a very complicated and elusive manner. Dealing separately with them would not appreciably affect the result of this inquiry, and therefore it seems better to leave them to be included in the different items as given.

Nevertheless, it would be of interest if someone would take the trouble to analyse each part of a farmer's receipts and expenditure, and estimate how transport charges affect his balance sheet at the end of a year. That is a separate problem which need not detain us here and now.

The heaviest item in the arable farmer's expenditure is labour, which, on the farm considered, amounts to 39 per cent. of the total costs in 1923–4. And, of all parts of the expenditure, the cost of labour is the most difficult to estimate accurately.

In the annual Reports on Agriculture Statistics issued by the Ministry, details are given of dates and figures for the official changes in wage-rates during the life of the Wages Board, and estimates are given of minimum and average wages at certain other dates from 1917 onwards. From this source estimates

have been made for the average rates paid during each of the calendar years under review. It seems that, compared with rates in 1911–13, the cash wages increased by the following percentages: 1917, 50; 1919, 136; 1920, 181; 1921, 163; 1922, 100; 1923, 75; 1924, 56.

On the whole, too, as is mentioned in the Reports, hours are shorter than before the war, though longer than in 1919 and 1920, and, at all events during the war, labour was less efficient. To allow for the increases in cost due to these causes, 15 per cent. has been added to the figures for the years 1918 to 1922, and 10 per cent. for the other years. The result is shown in the first line of figures in Table II. The first estimate given in the Reports is

TABLE II

Percentage Increase in Costs of Production on an Arable Farm compared with the Average of the three years 1911–13.

	Percentage of costs.	1911.	1915.	1916.		1918.	1919.	1920.	1921.	1922.	1923.	1924.
Labour . .	33·1	5	20	37	55	108	156	208	187	115	83	62
Feeding stuffs .	9·5	—	37	87	174	187	168	173	81	46	42	
Fertilisers . .	4·0	−2	15	56	96	111	115	159	120	47	24	
Seed . . .	6·2	1	27	60	101	132	158	192	115	75	35	
Implements, etc. .	9·7	2	19	53	72	101	164	240	180	81	56	
Coal, stores, insurance, etc. .	6·6	1	24	60	105	136	154	202	75	51	54	
Rent . . .	22·2	..	—	—	—	—	15	15	15	10	10	10
Rates . . .	2·7	4	8	—	8	16	40	120	135	120	10	10
Totals weighted for percentage of costs . .	100 0	2·4	18·4	37·7	62·2	92·0	121·7	159·9	121·9	72·5	51·1	

for 1917, and the increase is assumed to have risen steadily from 1914 till that year.

Seed, in years when prices have been tested, seems to have varied approximately with the index-number giving the price of "agricultural produce" generally. This index-number has therefore been used for other years.

The cost of implements, repairs, etc., is taken as the mean between the cost of labour and of steel bars as given in the *Economist*.

Coal, stores, etc. are taken as increasing as the index-number of "wholesale commodities other than food."

Rent was seldom changed during the war. In 1919 a rise of about 15 per cent. was common, which was often reduced in 1922. Rent increased less during the years under review than any other of a farmer's costs. No allowance is made either for a salary for

management or for Bank interest on loans and over-drafts. Both have to be reckoned as paid for out of profits. This treatment is again in conformity with the practice of the Institutes of Agricultural Economics.

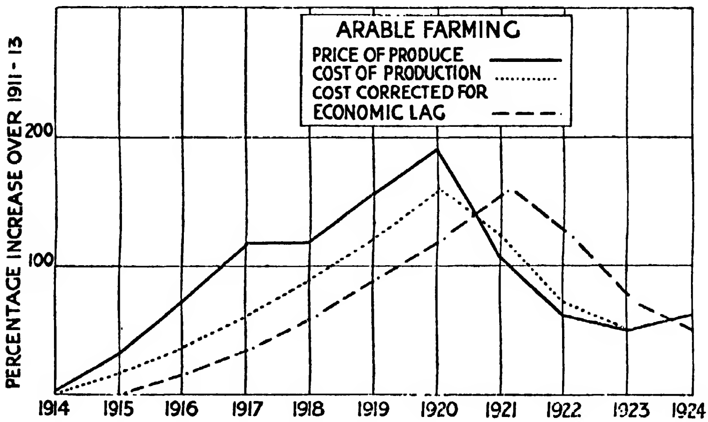

DIAGRAM I.

Profits and Losses of Arable Farming as compared with the "Normal Profits" of 1911–13.

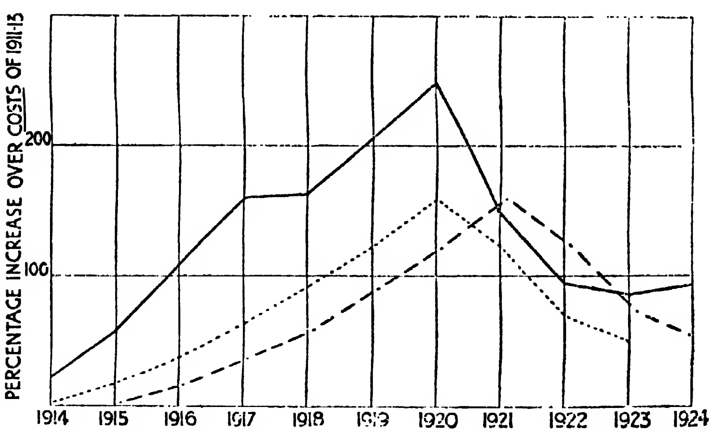

DIAGRAM II.

Absolute Profits and Losses of Arable Farming, taking the Annual Profit of 1911–13 as 20 per cent. on the turn-over.

The final yearly figures given in Tables I and II enable us to draw curves of relative prices and costs and therefore of receipts and expenditure on a typical light land farm for the years 1914 to 1924. Diagrams I and II (above).

It will be seen that these curves are not those which have hitherto been used in agricultural inquiries. In the first place, in considering the rise and fall of agricultural prices from 1914 to 1924 and the effects which have followed, former writers have either dealt with agricultural produce generally, with different products roughly weighted in proportion to their relative importance in English farming as a whole, as in the index-number of the Ministry of Agriculture, or else taken the rise and fall in price of one commodity, such as wheat.

Neither method seems to me to be adequate. It is better to take one type of farm at a time and calculate the rise and fall in its total probable normal receipts as the prices of its actual products vary. We thus get a picture which, if limited, is true to the object it is meant to represent.

Secondly, in dealing with the complementary problem of costs of production, existing treatment seems equally unsatisfactory. Many people have given diagrams for the changes during the last ten years in the cost of different items in a farmer's expenses, putting side by side curves for labour and for superphosphates, though the outlay on one may be ten times that on the other. Here too it is well to take one kind of farm, analyse its actual outlay, weight each item in the ratio of its relative importance, and draw a curve representing the total cost of production on that farm as it varies from year to year, to compare with the curve showing the total receipts.

During the pre-war years 1911 to 1913, agriculture was in a healthy state, making fair profits for those engaged in it. If we regard this state as normal, we may start the receipts and expenditure curves together at this period. Then any rise of the receipts curve over the other means an abnormal profit, and *vice versa*, any rise of the expenditure curve over that showing receipts means profits below normal or an actual loss.

In this way we get the receipts curve and the first of the two expenditure curves of Diagram I. Their comparison would give a history of the economic results of arable farming, if the expenditure were incurred at the same time as the receipts. But this, as we have seen, is far from the truth, and we must now consider the economic lag of this particular kind of agriculture.

The calculated lag for each kind of produce is carried to column 3 in Table III. In column 2 is given the output of each kind of produce as a percentage of the total sales, and in column 4 the economic lag weighted for this percentage. Adding together the figures in column 4, we find the average normal economic lag of this particular farm to be 13·77 months.

A normal average economic lag of 13·77 or (say) 13·8 months indicates that an arable farmer's expenditure is incurred on the average 13·8 months before his receipts come in. Hence, to get a true picture of his financial operations from the diagram, we must shift the expenditure curve to the right by an amount corresponding to 13·8 months, in order justly to compare the receipts for a given crop with the expenses incurred in growing it. This has been done for the second expenditure curve in Diagram I, shown by the thick broken line.

TABLE III

Economic Lag of Light Land Arable Farm.

Produce.	Percentages of sales.	Normal economic lag.	Weighted economic lag.
Wheat	7·2	13·6	·96
Barley	42·4	14·3	6·06
Oats	2·0	14·5	·29
Cattle	10·1	17·7	1·79
Milk	5·8	8·3	·49
Sheep and wool	14·4	15·0	2·16
Pigs	5·0	8·6	·43
Hay and straw	3·9	14·0	·54
Mangolds, sugar-beet and sundries	9·2	11·2	1·03
	100·0		13·77 months

Moreover, as already explained, the normal lag is the value for times of steady prices. When prices vary, especially when they vary so rapidly as in the years under review, the correction calculated above on p. 542 must be applied. The correction is proportional to the rate of change in prices, that is, to the slope of the curve from point to point, and is $\pm$ 1·8 per cent. for each fall or rise of 1 per cent. per month in the level of prices or costs. From this result it is easy to calculate arithmetically the correction at a few points, and thus obtain a final corrected curve. The result is to decrease the lag on the arable farm from 13·8 to values between 13·2 and 13·6 months during the rise of prices, and to increase it during the fall at times to as much as 14·1 months. This has been done in the corrected costs curve of Diagram I.

Instead of exhibiting variations from "normal profits" as is done in Diagram I, it may be interesting also to construct a diagram to show absolute profits and losses. It is probable that during the basic years 1911–13, a well-managed farm made a

modest profit. We may perhaps fairly start the receipts curve 20 per cent. above the expenditure curve, indicating a return, in interest and salary of management combined, of 20 per cent. on the turn-over, or about 10 per cent. on the capital invested. This approximately accords with the estimate that then average farm profits were about equal to the rent.[1] The increase in receipts year by year must be raised in the same ratio. The results appear in Diagram II.

Diagrams I and II set forth in different ways the economic results of arable farming during the years under review. In Diagram I the area between the receipts and expenditure curves measures the excess profits from 1914 to 1920, and the deficit from normal profits from 1920 to 1923, when the costs curve is higher. In Diagram II the corresponding areas measure the absolute profits and absolute losses. In both cases we deal with the trading account of our hypothetical ideal farm, where the chief products are barley and sheep, ignoring changes in valuation and individual good or bad fortune. The implication of these diagrams will be considered fully below.

V. West Country Dairy Farming

As a contrast with the East Anglian light land farm, we take Dorsetshire grass country, mostly on the heavy clay of the Blackmore Vale. Here milk and its products form the staple industry. The milk is collected from the farms daily in motor lorries, which convey it to "factories" on the railways. There it is forwarded to Bristol or Portsmouth or London, and any excess used, generally, to make cheese.

Two-thirds of the sales may be on account of milk. The rest consist chiefly of pigs which have been fattened and the redundant calves and superannuated cows. Most of the land is under permanent grass; the clay is difficult to cultivate, and the less arable a man has, the better he is pleased.

The particular farm taken for study has a total area of between 200 and 300 acres, of which 85 per cent. is permanent grass. Those at work, including the manager, may be considered as equal to 2·4 per 100 acres. In 1923–24 the total sales were equivalent to £7 10*s*. per acre, and £316 per man working on the farm. It is interesting to compare these figures with the £7 19*s*. per acre and £215 per man on the arable farm.

[1] See Sir J. C. Stamp, *British Incomes and Property*, p. 100.

Table IV

Percentage Increase in Prices of Produce from a Grass Dairy Farm compared with the Average of the three years 1911–13.

	Percentage of sales.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
Milk	66·0	3	17	57	91	151	200	203	163	79	75	70
Calves and young bulls	7·2	9	21	40	82	72	50	130	95	50	47	48
Cows	5·0	6	36	58	105	111	132	163	127	63	51	53
Fat pigs	14·8	6	29	67	126	166	176	230	128	87	65	37
Poultry and eggs	1·1	−3	17	44	83	184	159	165	119	92	70	65
Corn	1·5	7	62	79	132	123	123	147	119	46	40·5	52
Estate work and sundries	4·4	3	23	47	77	116	154	196	149	90	72	62
Totals weighted for percentage of sales	100·0	4·0	20·9	57·1	96·2	144·0	168·5	198·1	140·3	77·4	69·0	62·0

Table V

Percentage Increase in Costs of Production on a Grass Dairy Farm compared with the Average of the three years 1911–13.

	Percentage of costs.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
Labour	26·6	5	20	37	55	108	156	208	187	115	83	62
Feeding stuffs	33·4	—	37	87	174	187	168	173	81	46	42	
Fertilisers	1·5	−2	15	56	96	111	115	159	120	47	21	
Store pigs	3·5	18	28	63	80	135	179	274	152	119	124	
Implements and tradesmen	9·9	2	19	53	72	101	164	240	180	81	56	
Coal, stores and sundries	5·5	1	21	60	105	136	154	202	75	51	54	
Rent	17·6	—	—	—	—	—	15	15	15	10	10	10
Rates	2·0	4	8	—	8	16	40	120	135	120	100	
Totals weighted for percentages of costs	100·0	2·7	22·3	50·5	90·0	115·4	134·6	165·0	110·1	68·9	53·1	

Table VI

Economic Lag of Grass Land Dairy Farm.

Produce.	Percentage of total sales.	Normal economic lag.	Weighted economic lag.
Milk	66·0	7·65	5·05
Calves, etc.	7·2	6·95	·50
Cows	5·0	8·5	·43
Fat pigs	14·8	3·9	·58
Poultry and eggs	1·1	3·0	·03
Corn	1·5	13·6	·20
Estate work and sundries	4·4	5·0	·22
	100·0		7·01

It will be seen that the normal economic lag for this grass dairy farm proves to be only 7·0 months, as compared with the 13·8 months for the arable "sheep and corn" farm. The results of this difference will be discussed below.

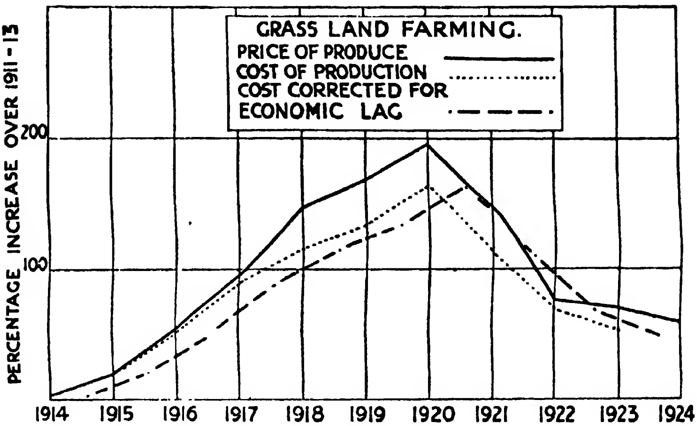

DIAGRAM III.

Profits and Losses of Grass Dairy Farming as compared with the "Normal Profits" of 1911–13.

In the years under review the costs rise 165 points in six years, or 1·2 per cent. per month on the middle value. The lag must therefore be corrected by — 2·2 per cent., and becomes 6·9 months.

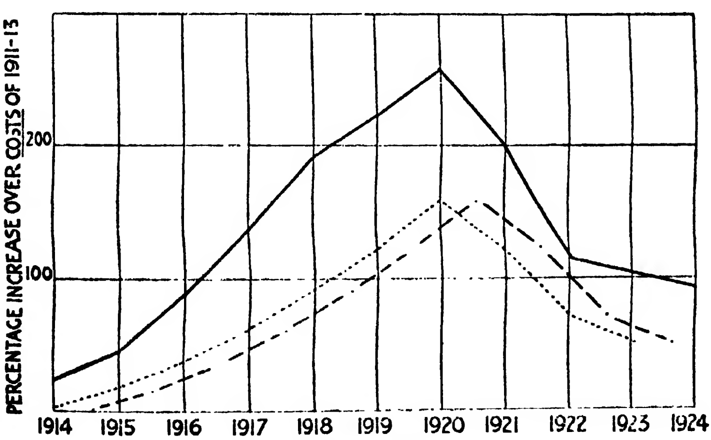

DIAGRAM IV.

Absolute Profits and Losses of Grass Dairy Farming, taking the Annual Profit of 1911–13 as 20 per cent. on the turn-over.

The fall is 102 points in three years, a correction of + 2·8 per cent., bringing the corrected economic lag to 7·2 months.

We can now plot the three curves of Diagram III for an ideal grass dairy farm: (1) Prices of Produce, (2) Costs of Production, (3) Costs corrected for Lag. In Diagram IV the curves are adjusted to show absolute gains and losses. This is done as before by taking the normal receipts of the pre-war years 1911–13 as 20 per cent. higher than the expenditure, and raising the price curve for other years *pro rata* throughout.

VI. Results

We are now ready to discuss the results of the investigation as summarised in the tables and exhibited in the diagrams.

But let us first repeat the caution already given. We are not concerned with changes in capital valuation; our conclusions refer, not to a farmer's complete profit and loss account, but to his cash trading account only. Moreover, nothing is allowed for salary as manager or for Bank interest; both of these must come out of the profits as shown. Again, we are not tracing the fortunes of any particular farm. Our ideal farm sells the same amount of produce every year, and always obtains the prices shown in the official averages. But, with these limitations, the diagrams show at a glance the economic results of arable and grass farming during the years 1914 to 1924.

In Diagram I, when the continuous line of prices coincides with the dotted line of simultaneous costs, the normal profits of 1911–13 are being earned. It will be seen that the costs line only rises above the receipts line from 1921 to 1923, and then by little. Were it not for the economic lag, the trading account profits of an arable farm would have fallen below normal only then and by that amount; from 1914 to 1921 they would have been above normal.

But when the costs line is shifted to the right to allow for the economic lag of thirteen or fourteen months, a very different outlook appears. The corrected costs, shown by the thick broken line, go on rising after prices have begun to fall rapidly, and the costs line is much above the receipts line from 1921 to 1924, showing a heavy loss in profits. The economic lag increases the profits made while prices are rising, but it also much exaggerates the losses while prices are falling. It increases enormously the risks of farming.[1]

[1] It is perhaps worth while to formulate the theory of economic lag in a complete credit cycle, at the end of which prices and costs return to their initial values. If the uncorrected lag, as given in Tables III and VI, were used to

In Diagram II an attempt is made to trace the absolute cash profit and loss, on the assumption that a profit of 20 per cent. on the turn-over (perhaps about 10 per cent. on the farmer's capital) was made on the average from 1911 to 1913. It appears that there should have been no absolute loss were it not for the economic lag—the dotted line never rises above the continuous line of receipts. But, when corrected for lag, the thick broken line shows a loss from 1921 to 1923. During those three disastrous years the arable farmer was selling his produce for less than it cost him to grow, irrespective of his heavy additional loss on valuations.

The area on the diagram representing the profit from 1914 to 1921 much exceeds the area measuring the subsequent loss. But our hypothetical farm is free from the risk of drought or floods, of disease or the chances of local markets. Moreover, profits tend to leak away to others; losses stay with him who makes them, or rather, perhaps, with him and his landlord. Steady, moderate returns are better than violent oscillations.

Now let us turn to Diagrams III and IV, which represent graphically the fortunes of grass-land dairy farming. Owing to the high price of purchased feeding stuffs, the rise in uncorrected costs is more nearly equal to the rise in the prices of produce, indeed sometimes feeding stuffs were almost unobtainable, and on some farms costs and receipts perforce diminished. Again, the economic lag of a grass farm is only seven months, half that of the arable farm. Thus both the profits and losses were less. Of course, valuable dairy herds had to be written down severely, especially from 1920 to 1922, but they are still worth more than in 1913—poor consolation, perhaps, to the man who bought them in 1919. But the ideal grass farm, in its freedom from actual cash loss, differs widely from the ideal arable farm. And it is clear that the chief cause of the divergence is the

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adjust the curve of costs, that curve, whatever its form, would simply be shifted to the right, but it would suffer no distortion. The difference between the areas under the curve of prices and under the curve of costs therefore would be unaltered, and it follows that the total profit over the whole term of years would not be changed by the lag, though of course it would be increased during the rise and diminished during the fall.

But the lag has to be corrected for changing prices, as on p. 542; its value is thereby made less during the rise and greater during the fall. The costs area is thus broadened out on both sides, and the total profit over the cycle is decreased by an amount measured by this increase in area.

Moreover, it is seldom that an economic enquiry deals with a complete credit cycle. In farming, at all events, the economic lag in a period of falling prices will produce the financial and psychological effects of agricultural depression, almost irrespective of former prosperity. This is true even of 1920 to 1923, and still more when the fall continues for twenty years, as in the last quarter of the nineteenth century.

difference in the economic lag. A grass farm is much less dangerous than an arable farm because its costs of production are incurred on the average only seven months instead of fourteen months before its receipts come in.

The diagrams suggest that the worst time for farmers is over. Both on grass and arable farms the receipts curve is now above the costs curve, though in 1924, while prices of arable produce rose, those from grass were still falling. Moreover, the diagrams do not show the bad effects of the wet summer and autumn of 1924 or of the return to the gold standard in 1925. Still, weather and other accidents apart, the general outlook is more hopeful.

VII. Agricultural Policy

The conclusion that grass land farming involves less risk than arable farming is in agreement with agricultural opinion. But, especially now, when there is a widespread desire to increase the area under the plough, it is well to analyse the economic factors underlying that known fact.

We can do but little to diminish the lag of arable farming. It is not quite beyond all control. The replacement of some of the ordinary root crop by sugar-beet, which is sold off and not fed to sheep on the ground, will shorten the lag, not only of the root crop itself, but of all the crops in the rotation. Still, the lag of arable farming must remain high, and, if arable farming is to be encouraged, the alternative is to decrease those fluctuations in price which are the curse of all industry and particularly of agriculture.

Of the three kinds of variation in price, that depending on plenty or scarcity affects only one crop or a few crops at a time. This has been partially met in some countries by co-operation among farmers for orderly marketing. How far their methods are applicable to English conditions is not yet clear.[1]

The waves of the credit cycle affect agriculture even more than other industries, chiefly because of its high economic lag, and the investigations which have been and are being made into its causes and cure should produce direct benefit to agriculture.

Then the long-term drift of prices, which, throughout the nineteenth century, turned first one way and then the other, as gold and the credit based on gold became relatively scarce or plentiful, is not too slow to determine agricultural prosperity or adversity. From 1875 to 1896, while the price of cereals fell by some 50 per cent., the general price level fell by about 40 per cent.,

[1] See, for example, J. A. Venn, *Foundations of Agricultural Economics*, p. 302.

so that the part of the agricultural depression due to monetary causes seems to have been much larger than that due to cheap transport and foreign competition, to which the whole trouble is usually assigned.[1]

Thus the agriculturalist, for the most part in sublime unconsciousness, is more deeply concerned in monetary policy than almost anyone else. He has more to gain by the stabilisation of the general price level. This is especially true of the arable farmer, whom the Government wish to encourage.

How far is it really necessary or desirable to reverse economic tendencies and force the plough on reluctant farmers? The military factor in the problem can hardly be discussed usefully by one without official information. But are the other considerations often adduced in favour of arable cultivation valid?

In the mere caloric value of the food produced there is no doubt. Sir Daniel Hall estimates that in starch equivalents an acre of arable land gives from 2½ to 3 times as much as an acre of grass. But, since more men have to be employed to cultivate it, the net excess of food is not as great as these figures indicate.

On the other hand, as now cultivated, the arable land yields a smaller proportion of the more valuable digestible proteins in milk and meat. Thus it is that the money returns per acre are about the same from our specimen grass farm as from the corresponding arable farm. As in other industries, the British producer specialises in high-quality products when he can. A more extended inquiry might well prove more favourable to grass,[2] for our arable farm is on good if light soil, while the grass is on somewhat poor clay. If it be objected that this takes no account of purchased feeding stuffs or other costs, the answer is that neither do the calculations of the relative caloric output, on which the advocates of universal plough-land rely. Except as regards the mere quantity of food, the yield per acre is probably as high from grass as from arable land; it is obtained at less cost, and, as we have seen, at much less risk.

Moreover, the output per man is more from grass land, so that it is generally possible to pay higher wages. But, here again, if mere quantity is concerned, arable land gives more employment. On the two farms we have contrasted, 3·7 men work on 100 acres of the arable farm, and 2·4 men on 100 acres of grass. This

[1] Since this paper has been in type the Committee of the Ministry of Agriculture on the Stabilization of Prices have issued a Report in which this subject is dealt with fully.

[2] See. H. J. Vaughan, in a paper just published in the *Journal of the Royal Agricultural Society*, Vol. 85, 1924, p. 205.

means about 24 men per square mile of country instead of 15. Sowing land down to grass diminishes aggregate employment, though it tends to raise wages, and increases the financial efficiency of the capital and labour applied. In an ordinary industry, this balance of economic advantage would settle the matter at once. A country can only increase in capital resources and national income, and improve the average standard of life of its people, if its industries are carried on at a profit and the excess re-invested—a doctrine old-fashioned but none the less true.

But the land is limited in area, and agriculture cannot expand to absorb the labour displaced by more efficient organisation as do other industries. That is why the question of employment bulks so largely in discussions of agricultural policy. There is a general desire to maintain a numerous, healthy and happy rural population, and it is certain that more men will be employed if the arable area is increased. But agriculture is not the only, though it is much the most important, rural industry. In developing it and others, the growth of electric supply should help. I have shown elsewhere that the probable demand is not enough to induce Supply Companies to run a network of electric mains over a country-side.[1] But, where there is a chain of villages, an electric supply becomes possible. Again, in several places, single villages have successful electric installations of their own. However obtained, good light and convenient power will add to the amenities of country life and aid in the development of rural industries.

Such developments may increase the rural population in various ways, though probably the largest single factor would be an increase in the arable area. On some land there is practically no choice of method for the farmer. Heavy clay in wet districts cannot be cultivated under the plough. Poor light land in the drier eastern counties will not carry permanent grass, the cost of fencing would be prohibitive, and water for stock sometimes unobtainable. But, of course, some land can be passed from one type of agriculture to another if the inducements are great enough. It is only this land which is really in dispute, and its amount is limited. As Sir Daniel Hall points out, even if we returned to the largest proportion of plough land we ever had, the highest estimate of extra men is about 250,000. But even that number is, of course, worth having.

Social and military factors are involved in the problem: it cannot be decided on economic grounds alone. But if the

[1] *Journal of the R. A. S. E.*, Vol. 85, 1924, p. 262.

Government means seriously to encourage arable cultivation, they must recognise the additional risk involved in its long economic lag, and face the difficult problem of the control of credit with a view to the stabilising as far as possible the general level of prices, including those of agricultural produce.

Among those who have helped me in the detail of this work, I wish especially to thank Mr. J. A. Venn and the other members of the Economics branch of the Cambridge School of Agriculture, and my own farm manager, Mr. C. Hodge. Acknowledgments are also due to the Royal Agricultural Society for the loan of the diagrams, which were originally prepared for my article in their Journal.

C. Dampier Whetham

THE KEMMERER-VISSERING REPORT AND THE POSITION OF THE RESERVE BANK OF THE UNION OF SOUTH AFRICA

(Report submitted by Dr. E. W. Kemmerer and Dr. G. Vissering on the Resumption of Gold Payments by the Union of South Africa, with Minutes of Evidence, Appendices, and Index.—Union Government, No. 13, 1925.)

THE currency history of South Africa since 1914 has been very similar in essentials to that of most of the belligerents. An unsound and hastily prepared piece of legislation in the Currency Act of 1914 permitted the banks to issue notes (previously stringently controlled) without the necessity of maintaining any specie reserve against them, and though convertibility was retained, an embargo on the export of specie was passed. As a consequence, more and more notes were issued and at the same time more and more credit was given, the whole being accompanied naturally by a steady rise in the cost of living and an equally steady decline in the cash reserves of the banks from about 20 per cent. in 1914 to 7·5 per cent. in 1919. The movement culminated, as in other countries, in the inflationary period and the speculative boom of 1919–20. The English paper pound had long been inconvertible, but had been maintained practically at parity with the dollar by "pegging" the exchange (4·76 dollars to the pound as compared with the par of 4·86), and as South African exchange was linked to sterling exchange and all South African bank-notes were legally convertible into gold, the South African pound was a gold pound at par with the English paper pound. With the unpegging of sterling exchange in the middle of 1919 the rate of exchange was allowed to follow its natural course, and there was an inevitable decline in sterling, showing a corresponding depreciation of the English pound, *i.e.* there was a premium on gold in terms of the English pound which reached finally 50 per cent. on February 5, 1920, when the price in London of a fine ounce of gold was 127*s*. 4*d*. as compared with the pre-war standard rate of 85*s*.

In spite of the fact that the notes in circulation in the Union were convertible into gold, the banks still quoted exchange on London as though English currency was on a parity with gold. As a consequence, gold coins were smuggled abroad to

realise the premium and the banks began to reap the harvest they had sown in the over-issue of notes, for they were compelled to buy specie in London at a premium and pay it out in the Union against their notes at par. Gold coins naturally disappeared, and the run on the banks, coupled with their already depleted cash reserves, constituted a dangerous situation. They, therefore, early in 1919 appealed to the Government to issue a proclamation declaring their notes inconvertible. As a result of their continued agitation, in March 1920 a Select Committee of the House of Assembly was appointed to investigate the effects of the embargo upon the export of specie. The constitution of the Committee was far from ideal, but as a result of its Report, issued in June 1920, the Currency and Banking Act, No. 31, of 1920 was passed, and came into operation on December 17, 1920. The notes of the banks were declared inconvertible, gold certificates were to be issued against gold deposited with the Treasury, and a Central Bank, known as the South African Reserve Bank, was established, which opened on June 30, 1921, for the purpose of consolidating the note issue and controlling the currency of the Union. The gold certificates were declared inconvertible until June 30, 1923, but as a result of the passing of the Currency and Banking Amendment Act, No. 22, of 1923, following the recommendations of a Currency Conference held in October 1921, this period of inconvertibility was extended to June 30, 1925. It was with a view to deciding whether this period should or should not be further extended that the Commission consisting of Dr. E. W. Kemmerer and Dr. G. Vissering was appointed last November.

Their Report, issued in February, is an extremely able and well-argued document, and presents in convincing fashion the case for South Africa's return to the gold standard—as one would expect from the reputation of the Commissioners. Dr. E. W. Kemmerer, Professor of Economics and Finance, Princeton University, U.S.A., is an economist of world-wide reputation and an enlightened advocate of the gold standard. He has been associated with currency commissions in the Philippines and in many South American countries, and recently assisted in establishing the Bank of the Republic of Colombia and in drawing up the banking and currency provisions of the Dawes Report. Dr. G. Vissering, President of the Netherlands Bank, is a banker of international repute. Practice, therefore, was wedded to theory in a sound combination, and the Government is to be congratulated on the selection they made. This Commission certainly stands in

striking contrast with that of the Select Committee of 1920, of which not one member could be considered an expert in the subject they were called on to investigate. The criticism of their constitution and their report by Professor Cannan in the ECONOMIC JOURNAL for December 1920, has very evidently been borne in mind in this case, much to the benefit of the Union.

The Report itself, which was issued separately in February last, is a closely reasoned document of about thirty pages, followed by twelve Annexures illustrating various points in the Report. The complete Blue Book, as indicated at the head of this paper, was published in April, and in addition to the Report and Annexures, contains the complete Minutes of Evidence, twenty Appendices submitted by various witnesses, bearing on different aspects of the question, followed by a detailed and most valuable Index, in all 598 pages. The whole volume reflects credit on Mr. J. J. I. Middleton, the Under-Secretary for Finance, who was primarily responsible for it. It is indeed a storehouse of facts on all aspects of a most complicated and intricate problem, particularly the Minutes of Evidence. Owing to the indisposition of Dr. Vissering, most of the examining was done by Professor Kemmerer, many of whose questions are illuminating in the extreme.

The investigation lasted altogether about two months, of which about five weeks were spent in the Union. Evidence was taken in London from a large number of experts and in the Union from thirty-nine witnesses, of whom one of the most important was again Mr. Samuel Evans, Chairman and Managing Director of the Crown Mines, whose wide knowledge and sound judgment much impressed the Commissioners.

As the Commissioners were careful to point out in their Report, the South African monetary unit, although bearing the name of a pound, has been for several years, both in its gold value and in its value as measured by its purchasing power over commodities, a different pound from the pound sterling, and the failure to recognise this fact has led to misunderstanding among bankers, merchants and the public generally. The whole problem therefore narrowed itself down to the question: Should South Africa, in determining now her future monetary policy, decide to tie up definitely with sterling, hoping that sterling would return to the gold basis soon, but being prepared to follow sterling wherever it might go, or should she decide to tie up definitely with gold? Sterling or gold? Which? The witnesses, therefore, were divided principally into two schools of thought:—

(1) Those favouring a return to gold independently of Great Britain, and
(2) Those in favour of following sterling.

There was a third group, the chief of which was Mr. W. H. Clegg, Governor of the Reserve Bank, who favoured following sterling up to a depreciation of 10 per cent. but no further. Of twenty-seven witnesses in South Africa who expressed definite views on this question, nineteen favoured the restoration of gold payments on or before July 1, four favoured linking with sterling conditionally, and four, including the managers of the Standard and the National Banks, Messrs. J. P. Gibson and G. R. Paterson, respectively, favoured linking with sterling unconditionally. The arguments of those, chiefly practical men, who favoured linking with sterling conditionally or unconditionally may be summarised as follows :—

(*a*) South Africa, if resuming specie payments independently of Great Britain, would not be able to maintain the gold standard in the event of British sterling receding in value.

(Appendix 14. Statement submitted by Mr. J. P. Gibson.)

(*b*) Assuming that South Africa resumed the gold standard at June 30 next, the position in the event of the British pound receding materially in its relationship to gold would be as in 1920 an extensive efflux of capital from the country.

(Appendix 14.)

(*c*) Greater fluctuations in exchange rates would ensue if South Africa resumed a gold basis independently of Great Britain.

(Appendix 19.)

(*d*) Linking with sterling is linking with the currency of the country with which South Africa does most of her trade.

Arguments (*a*) and (*b*) were the principal ones used to frighten the Select Committee of 1920, and before the present Commission their chief protagonist was Mr. J. P. Gibson, Senior General Manager of the Standard Bank; with this difference, that the present Commission refused to be frightened. The evidence on these points (QQ. 2109–2210) is most illuminating. Mr. Gibson, arguing on the false analogy of events in 1920 and

forgetting the principles which govern the international movements of specie, maintained that if South Africa were on the gold standard, and sterling receded in value, South Africa would be bound to lose all her ten to twelve millions of gold coin, because the banks would not be in a position to adjust the exchange and discount rates to prevent it. Those who held and hold this view would do well to ponder Section 42 of the Report, or read Q. 2124, Professor Kemmerer's reply to Mr. Gibson's statement.

"If there is a demand here for foreign payments, you have first your big balances abroad. You draw on them, and you raise your exchange rate accordingly, making the rate more and more unfavourable for imports and more and more favourable for exports; then if gold goes out, your reserve balances go down, your discount rates go up, your price level tends downward, and gold soon comes to be more valuable in South Africa than elsewhere, and the overflow stops. You would not export an undue quantity of your gold, any more than you would of your wheat or your mealies or anything else. The moment you export too much of it, it becomes more valuable at home than elsewhere." Mr. Gibson admitted (Q. 2204) that if he felt South Africa could maintain the gold standard he would certainly advocate South Africa's independent return, adding that "any banker would rather do his business or trade on the gold standard than on any other." Yet, as pointed out by Professor Kemmerer, he took up the impossible position that South Africa, which produces more than half the world's annual production of gold, cannot maintain a gold standard when little countries like Albania, Nicaragua, San Salvador, Haiti, Panama and Colombia, most of which produce no gold, can maintain the gold standard!

The argument that there would be a flight of capital if South Africa returned independently to the gold standard, an argument based entirely on events in 1920, turned out on analysis to be another myth. "The price levels of countries all over the world had been held up at very artificial levels through war conditions and through inflation. In 1920 there was a collapse in practically every country in the world. Now apparently what happened here was what happened generally everywhere. Countries had been exporting fairly heavily under war conditions, and they had been having great difficulty in importing supplies. Orders were not fulfilled promptly, so they ordered more than they wished with the expectation of getting a part of the goods. Imports were down and exports were up in many countries, especially neutral countries. Then, when the collapse came,

the exporters on the other side, wanting to take advantage of the high prices before it was too late, began to unload great quantities of goods in fulfilling these delayed, unfulfilled orders. Meanwhile they refused buying goods because of the collapse of prices, except at prices so low as to be inaccessible to sellers. And so you found here, as in the Argentine, Uruguay, Brazil, etc., a great influx of goods, a decline in exports and a smashing of the exchange rates. All this was part of the process of revaluing monetary units. Ordinarily this country has a very big excess of visible exports over visible imports. The year 1919 showed a great excess of exports over imports and the year 1920 showed a substantial excess of imports over exports, but the following year and every year since has shown an excess of exports." (Q. 2141.)

The risks incidental to a more fluctuating exchange are frankly admitted, particularly if sterling were to fluctuate rather widely; but certain off-setting factors are noted, and it is pointed out in the Report that the risks of a fluctuating exchange can to a large extent be avoided by the making of forward exchange contracts, which, though used to a great extent in most important countries, are apparently unknown in South Africa.

Running right throughout the evidence, however, is an appreciation by Professor Kemmerer of the grave danger which might ensue to South Africa should she link her currency to sterling and the latter were to depreciate, necessitating inflation in this country, with rising prices, labour troubles and discontent, and then, in accordance with the resolutions of the Cunliffe Committee, on sterling appreciating, deflation in South Africa would again be required—in other words, this country would have had to go through a period similar to what she has gone through during the last ten years. So that while linking up with sterling would give stability of exchange with the country with which most of our trade is done, that stability might be purchased at the expense of a fluctuating rate with all other countries and an unstable *internal* monetary unit—the latter always of supreme importance.

Moreover, when the Report was issued, conditions in South Africa were very favourable to a prompt return to the gold standard. For over two months the South African pound had been practically at par with gold, as measured by the mean between the banks' buying and selling T. T. rates on London, and on January 3 it was actually 0·86 per cent. above gold parity, " and if a rate as favourable as this continues long, South

Africa may find itself practically back on a gold standard with gold coin in circulation long before July 1." South Africa, too, of twenty countries for which figures were available, had deflated more in comparison with the situation immediately preceding the war than any other country, and consequently no further deflation would be necessary. In fact, as pointed out by Professor Lehfeldt, South African currency was then on the gold level, and therefore to get it on the sterling level would mean certain adjustments—and consequently from that standpoint also the advantage was on the side of gold.

A third favourable factor was South Africa's strong gold position. The banking position was sound, the ratio of cash to liabilities being about 20 per cent. Moreover, the recent establishment in Pretoria of a branch of the Royal Mint will enable South Africa to mint sovereigns here, and by so doing, to meet her needs for specie more promptly than in the past. In addition, the new Reserve Bank, carrying at the time of the Report the large gold reserve of £10,775,746, representing 64 per cent. of its outstanding notes and deposits combined, through its centralisation of the country's bank reserves, its liberal powers of note issue, its rediscount functions and its authority to operate in the open market, is in a position to exercise a conserving influence on the South African Money Market, and to check any dangerous credit expansion that may seem to threaten the gold standard.

"Your commissioners, therefore, believe that the wise and conservative action for South Africa to take at this time is to clinch gold parity while it is here and, to that end, to announce to the public at the earliest possible moment the intention of the Government to let existing legislation stand and to return definitely to the gold standard July 1 next."

The Report was dated January 8, 1925, and on the 12th the Government announced that it would not introduce legislation postponing the resumption of gold payments beyond June 30. Long before that date, however, the situation foreshadowed in Section 16 of the Report arose. The concluding sentence of that section was: "It is sufficient to say if sterling returns to parity by July 1 next, South Africa's problem will have been largely solved." Great Britain reverted to a modified form of the gold standard on May 1, followed by the other dominions and Holland, and on May 18 the Minister of Finance stated in the House of Assembly that, owing to changed conditions, the Union would revert to gold forthwith, and from that date the movement of gold has been freed from all restrictions.

The Reserve Bank

The problem of the return to the gold standard is, therefore, now happily a thing of the past, but the Commissioners made some most interesting suggestions with regard to the maintenance of that standard, the suggestions relating principally to the functioning of the Reserve Bank, for it is clearly indicated in the evidence that much of the ill-considered agitation for a State Bank arises out of dissatisfaction with the Reserve Bank and an inadequate appreciation of what its powers actually are.

The Act creating the Reserve Bank was assented to on August 16, 1920. Though the Bank did not actually open until June 30, 1921, much of its history, therefore, has been during the period of South Africa's deflation, a deflation that was necessary if the country was to return to the gold basis without reducing the gold content of its sovereign; and a period of deflation is no time for a newly organised central bank to extend its business by low rates and liberal credits either to the banks or to the public.

Moreover, there has been all along a complete misconception on the part of the public and the commercial banks as to the functions of the Reserve Bank. Its establishment was strongly opposed by the commercial banks, who saw in it a possible competitor, and it is clear from the evidence that " a gentleman's agreement " was affected with a view to limiting its scope of operations and curtailing its competition. The idea, therefore, though utterly contrary to the text of the Bill, fostered by certain expressions in Parliament during the passage of the Currency Bill and by the attitude of the other banks, gained general acceptance even among the commercial community (see evidence of Mr. Karl Gundelfinger, QQ. 3829–3854), that the bank was exclusively a banker's bank and could not deal with the public—an impossible idea even considering the circumstances of its birth, when there were five or six commercial banks, but rendered quite stupid when, by amalgamation and absorption, those banks have been virtually reduced to two large banks, the Standard and the National, constituting a close monopoly, and by agreement carrying out a common policy of exchange rates (apparently fixed quite arbitrarily), discount rates and commercial practice. Not only, therefore, in the past three years has there been practically no competition between the commercial banks, but, by agreement, the Reserve Bank

has not provided the competition which by its powers it could legally have exercised.

A further consideration is that the two large commercial banks have capitals and reserves much in excess of the Reserve Bank :—

	Capital paid up. £	Reserve Fund. £	
Standard Bank, Ltd. . . .	2,229,165	2,893,335	Dec. 31, 1924.
National Bank, Ltd. . . .	2,075,500	150,000	do.
The S.A. Reserve Bank . .	1,000,000	152,825	Jan. 24, 1925.

Consequently they have had no need to call upon the Reserve Bank: the National Bank, it is true, has rediscounted to a certain extent with the Reserve Bank, but the Standard Bank all along has maintained a position of aloofness and independence.

Another factor in weakening the position of the Reserve Bank is the Open Credit System in this country, to which, despite protestations to the contrary and many promises to remedy it, the commercial community and the commercial banks seem indissolubly wedded. It was because of this system, and the consequent lack of suitable high-grade commercial paper for rediscounting, that in 1923 the Reserve Bank, by the Currency Amendment Act, was given power to utilise short-date Treasury Bills, both of the Union and of the Imperial Government.

Again, most Central Banks are generally made the depositary of Government Funds, *i.e.* they act as the bankers for their Governments, and this ordinarily has two advantages :—

(1) It increases the funds of the Bank by an absolute amount, thus increasing its control over the market.

(2) At certain times of the year when taxes are paid there is a heavy transfer of balances from the bankers' deposits with the Central Bank to the Government deposits, and at such times, more than at others, the Central Bank has the whip hand in the market.

In contradistinction to this well-understood and generally accepted principle, the S.A. Reserve Bank has not been in the past, and is not now, either the sole or indeed the partial depositary of Government Funds.

Born in a time of financial stringency, disowned by the banks, unutilised by the Government, its functions completely misunderstood by the public, it is not surprising that the Reserve Bank has been so far a somewhat ineffective institution.

It is with a view to remedying this condition of affairs and

making the Reserve Bank what it actually should be—the servant of the public and a powerful force in the control of currency and credit in this country—by making its rates effective, that the Commissioners made the following suggestions :—

"The bank must be affected with a great public interest, and must enter the open market when the public interest demands that it should. It must be able to cover its expenses, build up a reasonable reserve and pay adequate dividends on its capital in normal times. For this it has nearly adequate powers under the Act, but certain minor changes in present law should be made."

While the inquiry was in progress the Reserve Bank lowered its rates of discount to a figure below that of the commercial banks, and arrangements have already been made for the opening of branches in the Union. If the other recommendations are carried out, and the bank pursues a bold and energetic policy, there seems no reason to doubt that it will eventually occupy its rightful place in South Africa as the cornerstone of her currency and credit system. Unfortunately there are as yet few signs that this energetic policy is to materialise; many of the principal recommendations of the Kemmerer–Vissering Report and of a subsidiary Report issued by Dr. Vissering appear to have been shelved or politely forgotten. At the fifth ordinary general meeting of the South African Reserve Bank, held in Pretoria on June 8 last, Mr. W. H. Clegg, the Governor, reiterated the old ideas : "They would not exclude the general public, but," he added, "their transactions would probably be mostly with the other banks and the Government."

It is one thing, apparently, to invite an expert commission to advise this country on its currency policy, but quite a different thing to get those recommendations carried into effect. Competent and authoritative opinion in South Africa at present is that if the S.A. Reserve Bank policy is not radically changed, the agitation for a State Bank will become more insistent.

C. S. Richards

P.S.—Since the above was written, the recent amalgamation between Barclay's Bank and the National Bank introduces a new factor, and makes it more than ever imperative that the Reserve Bank should pursue a more active and more forceful policy: otherwise it seems improbable that it will be able effectively to control currency and credit.

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PROBLEMS OF COMPENSATION

1. IN this article I propose to consider the problem of State compensation to individuals whom State action has injured. Plainly there are certain forms of injury in regard to which no suggestion that compensation should be paid can be made. Thus a man whom the State decides to punish for an offence, whether by imprisonment or by fine, will not expect that injury to be compensated. But sometimes the State, acting in the general interest, either takes from an individual something that has hitherto been recognised as belonging to him, or forbids an individual to do something that he has hitherto been free to do. At first sight it may be thought that these two sorts of State action are sharply distinct. In fact, however, to take from a man something that belongs to him is to remove the whole bundle of his property rights in respect of a thing (or person); to prohibit him from following a certain line of action is to remove a part of this bundle. The two sorts of expropriation, may, therefore, conveniently be discussed in connection with one another. When the State has to resort to either of them the persons affected have a *prima facie* claim to compensation : a live issue is raised.

2. In modern conditions by far the most important part of the calls made by the State upon individuals—apart from personal military service, which will not be discussed here—consists in money taxes. The tax system is designed, it may be presumed, with a view to providing the revenue that is needed, and at the same time distributing the burden involved fairly among different classes of citizens. All tax-payers are, of course, injured by the payments they have to make; but, since the only source out of which compensation could be paid is further taxation, it is obviously impossible that they should all be compensated for the injury. It would not, of course, be impossible to compensate some of them at the expense of extra taxes upon others. In general, however, there would be no point in doing this; for, if it is thought that the taxation imposed on a particular class is unduly high, the natural remedy is to reduce that taxation, not to leave it intact and neutralise its unfairness by a countervailing payment of compensation. Hence, in general, for injuries inflicted upon individuals by taxation there can be no question of compensation payment.

3. This does not, however, exclude the suggestion that, when a tax system generally accepted as fair is altered by the introduction of new imposts specially burdensome on a particular group, this group should be compensated, not by a payment, but by the remission of other taxes hitherto falling upon it. The issue here turns chiefly on the question whether the new taxes are imposed with the intention of altering the distribution of the tax burden to something now held to be more fair or with the intention of introducing a new tax that is technically good in preference to increasing existing taxes in a common proportion. If the intention of the State has been to alter distribution, for example, to make rich people pay more, and if it has, with this object, stiffened up, say, the super-tax, it would be stultifying itself if it were to compensate super-tax payers for their extra burden: it has deliberately decided that they ought to bear the extra burden and has imposed the new tax for that very end. But the case is different if the State decides to collect part of its revenue by, say, additional death duties, on the ground that these are technically preferable to income tax over certain ranges of income. In these circumstances people within those ranges could reasonably claim that the remission of taxation, which the revenue yielded by this new impost made possible, should be so arranged as to benefit them, putting them in the same net position, relatively to other people, as they occupied before. In like manner, if it were decided for general social reasons to impose a duty on imported wheat, there would be a good case for putting a special tax on agricultural landlords to neutralise the advantage which would otherwise accrue to them at the expense of the rest of the community. As Sidgwick observes: "The fundamental question is whether the design of the change is to get rid of the technical defect or indirect disadvantage of certain established taxes or to alter the distribution of the burden of taxation in order to make it more equitable." [1] Unless, however, a new tax chosen on account of its technical merits does large and obvious damage to a particular clearly defined group, or confers large and obvious benefit on such a group, adjustments on these lines are not feasible. Whatever incidental unfairnesses there are must be borne as best they may. Hence not much in the way of practical rules can be built on the foregoing considerations; and, in any event, they lie somewhat apart from the main purpose of this article.

4. Generally speaking when Governments want any sort of

[1] Sidgwick, *Principles of Political Economy*, p. 188.

thing or service, the quantity that they need is fairly small compared with the producing power of the country in respect of that sort of thing or service; and, therefore, if there is no violent hurry, what they need can be provided at a price which does not yield any abnormal profit to anybody. There would be no point, for instance, in the Government's commandeering the motor lorries or the clerical labour that it needs in the ordinary course, because it could not well pay less for the commandeered things than the market price, and for the market price it could get them without commandeering. There are, however, two cases to which these considerations do not apply. The first is the case of unique key things that cannot be reproduced in the market; the second the case of very large Government demands occurring so suddenly that new production cannot satisfy them, and resort must be had also to things already in consumers' hands.

5. An imaginary instance of an unique thing, not susceptible of reproduction, desired by the Government would be furnished if it were decided to develop a national collection of works of art or of historic buildings, and particular works or buildings in private hands were needed for this collection. Practical instances are easily found. Thus, the Government decides to nationalise, either permanently or temporarily, the railway system or the telephones, and, to this end, needs to buy out, or to obtain a lease from, existing owners of these things. Here it is confronted with a seller possessing monopoly power, and, unless it can override him by law, may be forced to pay a sum that will yield him a much larger income than he has been deriving, or has hoped to derive, from his property, so that he in effect levies a ransom on the public. Again, a Government, in order to facilitate the building of a railway or the establishment of small holdings or some other social end, has need of certain *particular pieces* of land. Once more it is confronted by monopoly and, unless it can exercise legal compulsion, is liable either to have a socially useful enterprise estopped or to be mulcted of outrageous sums. In these two cases compulsory purchase at an officially fixed price is the obvious and only solution. Closely similar considerations arise if a Government decides to nationalise permanently or temporarily *all* property rights in coal mines or land rents or mining royalties. Here we are not, indeed, dealing with unique things in the hands of a single monopolistic seller, but with a number of things in many hands. But, since the Government needs *all* of them, it is not in a position to bargain in the market, and some of the sellers, unless there is compulsion, may, therefore, be expected to stand

out successfully, just as a monopolist might do, for an unreasonable price.

6. The other case of sudden and very large demand exceeding present capacity for new production is practically realised only in time of war. Horses, motor-cars, stocks of certain sorts of food, particular classes of foreign securities, may be needed in the largest procurable quantities all at once. So may, *for a time*, the services of railways and of ships and of particular buildings. To offer the market price or even something a good deal better would not call out *at once* offers to sell from *all* even of those persons who might be expected to make offers eventually; and some owners would not sell at all for any reasonable price. In essence there is not very much difference between this class of case and the preceding class. We are again dealing with a situation in which potential sellers of what the Government needs are in an exceptionally strong position and could, in the absence of compulsion, extort terms and cause delay highly injurious to the public interest.

7. We have then, in the various conditions contemplated above, to consider on what principles the amount, if any, of the purchase price, or compensation money, paid for things and services purchased compulsorily may properly be determined. On this matter there are large differences of opinion, and several distinctions will need to be drawn. One general observation should, however, be made first. There is a widespread tendency to describe failure to compensate for the recession of particular property rights in terms, such as robbery, that imply that something *illegal* is being done. But property rights are the child of law, which is itself the creation of the public political authority. It is evident, therefore, that, except where there is an overriding written constitution, there can be no question of *illegality*, whatever a sovereign public authority may choose to do in respect of property rights hitherto enjoyed by its citizens. A statute passed in due form by the British Parliament taking away all property rights, or some particular property right, from all red-haired men or from some particular red-haired man, might be objectionable, but could not possibly be illegal. The use of such a term as *robbery*, therefore, when applied to acts of sovereign public authorities, is inappropriate. That term signifies the taking away by force or fraud of something to which the robbed person has a legal right. When a public authority acts in due form it never does this: it withdraws a right which it has itself created; and, from the point of view of legality, nobody can have any ground

of complaint. The expropriation by a private person of something to which another private person has a legal right and the withdrawal by the public authority of that legal right are acts of entirely different kinds. Any use of words that tends to confuse them should be avoided.

8. Fundamental to the problem of compensation is the principle of equity. This principle in its barest form asserts that *similar persons should be treated similarly*—by the public powers as by anybody else. Sidgwick held that knowledge of it is given in direct intuition. That view, if it is accepted, is a sufficient defence. But, if it is not accepted, there are also available, to support the principle in its economic application, other considerations. First, if a £1000 has to be taken from two people of equal wealth and similar temperament, the law of diminishing utility shows that less hurt will be caused if it is taken in equal parts from each of them than if it is taken in any other proportion. Secondly, if it is taken in any other proportion, a sense of being unfairly treated will be created in the person who pays the larger amount; and this is in itself an evil. Thirdly, unequal treatment of different people, when no good cause can be shown for it, breeds a sense of insecurity all round; for everyone feels that he may be the next victim. This discourages people from working and saving to obtain possession of durable things; and so indirectly strikes a blow at the accumulation of capital much heavier than would be struck by the collection of an equal sum of money on some intelligible non-arbitrary plan. It will be generally agreed that these considerations taken together establish the principle of equity, for the purpose of the present inquiry, on a firm basis.

9. Unfortunately, however, the principle, in its barest form as sketched above, cannot be applied to practice, because in real life no two persons ever are exactly similar. Hence the principle must be expanded, so that it declares: "different persons should be treated similarly unless they are dissimilar in some *relevant* respect." In the abstract nobody is likely to quarrel with this. But the importation of relevance, none the less, raises difficult issues: for we have to decide what dissimilarities are, and what are not, relevant. In the last resort this can only be done by direct judgment applied to the detailed circumstances of particular cases. But the task of direct judgment can be made easier by a preliminary survey of a more general kind. To this end it is convenient to distinguish between the commandeering of a few individual items within a class of similar things and the commandeering of the whole of a class of things—under which latter

head will be included the commandeering of a single thing if it is the sole member of a class. I shall consider first the commandeering of particular items within a class, and shall begin with commandeering which takes place at a time when general conditions are stable.

10. In stable conditions the notion of membership of a class presents no serious difficulty. It may, no doubt, be pointed out, for example, that there are a number of different types of motor-car; and it may be asked whether a particular car is to be regarded as a member of the class " cars in general " or of the class " cars of its own type." But, since general conditions are supposed to be stable, so that the relations between the owners of different types of car are constant, it does not matter whether this question is answered in the one way or in the other; and there is no need to cavil at any classification with which common sense and general usage presents us. Without, therefore, pressing this matter further, we may proceed to illustrate the sort of commandeering that has now to be studied. Examples are afforded by the expropriation of particular pieces of land which happen to lie on the road of a proposed railway, or that are specially fitted for small holdings (whether the levy be a levy proper or a compulsory leasing); or of particular horses or stores of hay, or of particular buildings that happen to be suitable for billeting troops. The principle of equity clearly requires that the owners of those particular items should not be hit harder by Government action than exactly similar owners of other similar items. They should be paid such amount of compensation as is required to prevent this.

11. It may perhaps be suggested that this way of looking at the matter is too simple and that true equity requires us to take into account the wealth and family estate, and, perhaps, the age of the several persons affected. This, however, is not so. These things are, indeed, highly relevant to the amount of taxation that the several owners should be made to bear. They are also relevant when what is contemplated are compassionate allowances to deal, of grace, with hard cases to which the principle of compensation is held to be inapplicable. But they are not relevant to the question whether, in fact, that principle is applicable, whether, for instance, compensation should be paid for the commandeering of certain people's motor-cars or land. It would be " unfair " to pay such compensation to married men but not to bachelors, or to poor men but not to rich men; for, as we must presume, differences in these respects have already been taken

into account in the assessment of general taxation. To regulate compensation payments in the light of them would be to count the same thing twice over—to punish a man a second time for one offence. In like manner, when we have to do with the expropriation of particular items of property within a general class, considerations connected with the character of that class as a whole are not relevant. If it is held that the class is one on which special burdens ought to be assessed, this should be done by taxes affecting the whole class, not by arbitrary blows at particular items within the class. When particular items are expropriated, it may, indeed, be held, on grounds connected with the nature of the class, *e.g.* liquor licences, that no compensation should be paid out of *general* funds. This is, however, in no way incompatible with the payment of compensation to the owners of the particular items; for this can be done out of funds raised from the owners of all the items in the class affected, including the owners of the expropriated items.

12. There still, however, remains a difficulty. The principle of compensation—for the kind of case contemplated so far—is established, but the amount of compensation that will put a man whose field or motor-car has been commandeered in the same position as one whose similar field or car has not been commandeered is not yet defined. If the thing commandeered were seven sacks of No. 1 red winter wheat, the payment required would obviously be the market value of this number of sacks; for that payment would enable the expropriated proprietor to replace exactly what had been taken from him, so that, except for his share in the taxes needed to provide the compensation money (in respect of which he stands on the same footing as everybody else), he would not be affected at all. But a particular piece of land or a house, or possibly even a motor-car, may have a special value to the owner greater than its market value. To part with it may involve a loss to him of what *he* values at £10,000, though the market only values it at £2000. In these circumstances what value ought to be taken as the basis of compensation? The principle of equity suggests: the monetary representative of the special value of the property right to its owner. For, if the market value is taken, he is really hit harder than other people because he happens to own this particular piece of property. This conclusion must, however, be qualified before it can be applied to practice. When the particular piece of land or house has a special value to its owner because, when associated with him, it carries goodwill—*e.g.* a shop in the place where the owner is

known—this goodwill can without great difficulty be valued and reckoned in the compensation money. But when it has a special value due to sentiment and so on, no such objective valuation is feasible, and account cannot, therefore, be taken of it. We must content ourselves with such rough justice as is afforded by the payment of something, say 10 per cent., in excess of market value as compensation for disturbance.

13. We may now pass to a more difficult case in which general conditions are no longer supposed to be stable. Here the principle of equity and the notion of particular items within a general class no longer yield guidance. Let us suppose that we are dealing with something to which the difficulty discussed in the preceding section does not apply, so that in normal times market value—a perfectly definite thing—would be proper compensation to an expropriated person. In normal times this market value would correspond roughly to cost of production, and the payment of it would, therefore, put the expropriated person at once in the same absolute position as against other persons with similar bits of property, in the same relative position as against other persons with dissimilar bits of property, and in the same absolute position as against himself previously. In times of disturbance, however, this is no longer true. There are three things for equity to choose from : equivalence to other owners of similar property, equivalence to other owners of dissimilar property, and equivalence to the expropriated person's self in the past. An illustration of the difficulty is afforded by the action of the British government in commandeering some ships, but not all ships, from private owners during the Great War. The owners of non-commandeered ships were making enormous profits as compared both with themselves previously and with the owners of most other sorts of property. Would it have been proper to compensate the owners of commandeered ships upon terms that enabled them also to do this? The Government in fact paid pre-war Blue Book rates, which were designed to put the commandeered owners into their pre-war position, but which, in fact, since no allowance was made for the fall in the purchasing power of money, put them in a rather worse position than this. To the plain man—apart from the failure to take account of the change in the value of money—this arrangement would probably commend itself as fair. Why, he would ask, should a particular ship-owner be compensated for not being allowed to get an unexpected and unworked-for windfall, merely because another ship-owner has had that piece of fortune? If, however, instead of a boom, there had

been a great slump in the value of ships, the plain man would not have thought it reasonable for the Government to pay for commandeered ships at pre-war rates—which then would have stood much above the rates currently received by other shipowners. And yet the principle is exactly the same! The plain man's thought seems in fact to be: arrange your compensation terms in times of disturbance in such wise that the owner of commandeered goods is prevented from enjoying windfalls that he would have got apart from the commandeering, but is not saved from suffering anti-windfalls which he would have suffered apart from it. This view lacks logical symmetry; but it is, none the less, the one which most students—the present writer among them—will be inclined to adopt.

14. There remains for consideration one peculiar case also associated with times of disturbance. Suppose that an insurrection breaks out in a particular part of the country, and that, in order to deal with it, the Government has to commandeer motor-cars and houses there; or, more strongly still, that it has to do this because the district has been invaded by a foreign enemy. This commandeering is merely an incident in a larger whole; and the question whether compensation should be paid for it must turn on whether or not compensation is being paid for the damage that the insurrection or invasion has inflicted on other property owners in the district. If the Government is unable or unwilling to make good that damage, it would be unreasonable to expect it to make good the damage caused by its own commandeering. The same class of consideration applies to commandeering, *e.g.* of surviving houses, required to meet the distress caused by an earthquake in a town where most of the houses had been destroyed. Apart from these special cases we may lay it down that, for the expropriation of particular items within a general class, compensation should always be paid in such wise that the owners of the expropriated items are not subject to damage from which the owners of other items in the class are exempt.

15. We now turn to the problem of compensation in its application to classes of items instead of to particular items within a class. This problem connects closely with the discussion of the preceding paragraph. For in one aspect it is equivalent to the problem whether, or in what circumstances, the compensation to be paid to an expropriated individual inside a class should be provided by taxes confined to members of that class, or by taxes spread over the whole community. Under the latter plan

the class, some of whose members have been expropriated, is compensated for the damage thus done to the class as a whole: under the former case it is not. An instance of the latter plan is afforded by the arrangements in connection with the commandeering of ships that have just been discussed: an instance of the former by Mr. Balfour's Liquor Licences Act, in which a compensation fund for expropriated licensees was obtained by a levy on licensees who were not expropriated. We have to consider in what conditions the one and in what the other of these rival policies is called for.

16. First, in so far as the act of expropriation of particular items within a class either itself causes, or is bound up with a policy that causes, an increase in the value of other items within that class, there is a clear case for levying the compensation money from the owners of those benefited items. Thus, if the State commandeers a piece of land to enable a tramway to be built to the outskirts of a town, with the result that the surrounding land is made more valuable, the owners of this surrounding land ought plainly to pay. The same argument holds if neighbouring licensed houses are benefited by the compulsory closing down of rivals. This is the principle of betterment. In the abstract its equity is beyond debate. We may, however, be debarred from applying it in practice by inability to determine with any exactitude *who* have enjoyed the betterment and *how much* betterment they have enjoyed.

17. Secondly, when a class, some among whose members are being expropriated, is enjoying as a whole exceptional good fortune, there is much to be said for taking the compensation money from the class, even though its good fortune is not due to the expropriation policy. Thus it would seem that the money to pay for commandeered ships during the war might well have been obtained by a special levy on ships that were not commandeered. An arrangement of this kind, if it could be worked in practice, would almost certainly commend itself to the plain man's sense of equity; the commandeering of some ships at pre-war rates being regarded as a partial set-off to a windfall to ship-owners as a class, that, even so, remains very large.

18. Apart from these special cases there is not in principle any reason for throwing the burden of compensating particular expropriated members within a class upon the members of that class, except when it can be shown that the class as a whole ought to be subjected to a burden larger than it is at the time bearing under the existing system of national and local taxes.

This issue is most conveniently discussed in connection with the expropriation of classes as wholes—whether classes of one member or of many members;—with the expropriation, for example, of private railways companies, telephone companies, royalty owners, land-owners in general, slave-owners, owners of feudal rights, owners of rotten boroughs. We need not consider again here the difficulties that arise in periods of disturbance or those connected with the fact that certain things have a special value to their present owners. Apart from these difficulties we have to ask: Ought compensation to be paid in any or all of the above cases in such wise as to put the owners of the expropriated class of things in the same position as other owners, or are there relevant peculiarities about the expropriated class that warrant a refusal to pay full compensation or even to pay any compensation at all?

19. Certain property rights have a defective legal status. Thus the holders of licences for the sale of alcoholic drinks have no legal title to a renewal of their licences, so that to refuse to renew is not to remove any legal right. On this ground it might be argued that here there is no case for compensation. Against this I answer that *reasonable expectation* is a more fundamental thing than legal right. Thus, if from the beginning of the world every licence had always been renewed, the absence of legal right would clearly be a mere technicality. It does not, of course, follow that the compensation paid should be equal to what it would have been if there had been a legal right; for generally, if there is only custom, the reasonable expectation of renewal will be *pro tanto* less. This, however, will be reflected in the market value of the "right"; and compensation up to this value will, therefore, *apart from other arguments* (cf. *post*, section 23) be proper.

20. A second plea refers to the manner in which the right in question originated. This is sometimes urged in regard to the proposed nationalisation of land or of mineral royalties. These things, it is said, ought never to have become subject to private property rights. Whereas other property is the fruit of man's labour and waiting, mineral deposits and land are a free gift. *Therefore*, so runs the argument, they may properly be expropriated without compensation; they should be put back into the same legal position that unfound gold and silver in this country hold. Now the question whether land and mineral deposits ought to have been allowed to come into private hands is much disputed. But in fact they have so come. Having so

come, their present owners have bought or inherited them in exactly the same way as other people have bought or inherited other sorts of property. To expropriate them without compensation and not so to expropriate other sorts would involve grave inequities. For suppose that, shortly before the new law was passed, one man A had exchanged with another man B £100,000 worth of land against £100,000 worth of War Loan. Expropriation of land alone would leave A untouched while taking the whole fortune of B; though, until a moment previously, A is and B is not an owner of land. The unfairness is gross and palpable. The argument for compensation implied in it derives its main force, of course, from the circumstance that land is a marketable commodity. The mere fact that a man has enjoyed an unwarranted right in the past is not, if his right is inherently indefensible, a good ground for continuing it. But things that have lasted a long time are in actual life frequently transferred by sale. *In general,* therefore, I conclude that the origin of particular classes of property rights in the distant past is not relevant to the compensation issue.

21. A more difficult question arises when it is claimed that the activities associated with certain classes of property rights, although hitherto permitted by law, are anti-social. This plea is not applicable when the State is proposing to buy up particular property rights in order to operate them itself—on the lines on which they are being operated now—for this intention on the part of the State *implies* that the activities in question are not, in its view, anti-social.[1] Examples are the State purchase of privately owned railways and telephones. When, however, the State seeks, not to transfer to itself, but to destroy, a particular class of property right, the presumption is that it does consider the activities associated with that right anti-social. In cases of this kind advocates of compensation lay stress upon the fact that the activity attacked has hitherto been legal: that people have invested money in it, trusting to the law; and that it is unfair to hit them in a way that other investors in equally legal enterprises have escaped. Opponents of compensation, on the other hand, point out that, if compensation is paid for the abolition

[1] It is sometimes suggested that, when the State takes over something to operate it itself, the case for compensation is strengthened by the fact that the State operation yields a fund out of which compensation can be paid. There does not seem, however, to be very much in this, except from the relatively unimportant point of view of budget technique; for presumably, if the State decides to abolish a thing rather than run it, this means that it expects a larger final "fund" of welfare to be furnished in that way.

of this class of right, an expectation of compensation, should anti-social but legal activities afterwards be prohibited, is created. Therefore people are encouraged to invest in this class of things more than they would be either if it were certain that there would be no compensation or if compensation were doubtful. It may perhaps be thought that, with compensation at *market value*, this sort of effect would not follow, because market value will allow for any uncertainty there may be. But this is a fallacy. For to announce beforehand that, should expropriation take place, market value compensation will be paid would remove the uncertainty, and consequently cause market value to be on the basis of certainty, not uncertainty. Though, therefore, in an isolated case, when expropriation is decided on for a thing in respect of which the prospects of compensation have been uncertain, market value may be the *immediately* appropriate basis, it may not be the *ultimately* appropriate basis, when account is taken of the effect on the market values of other anti-social concerns. It should be noted that this argument does not apply with full force to the expropriation of rights which either (1) have become anti-social for the moment through an external act, *e.g.* the right to publish meteorological reports, which is anti-social in war time; or (2) have only recently come to be thought anti-social by a significant number of people. In actual practice the conflict between the opposing arguments has worked out variously on different occasions. Thus, in the United Kingdom, when the abolition of rotten boroughs was first mooted, it was proposed to pay compensation: when it was carried out in 1832, no compensation was paid. When slavery was abolished in the West Indies, twenty millions were voted by the Imperial Parliament in compensation to the owners; but, when slavery was abolished in the United States after the Civil War, there was no compensation. In like manner no compensation was paid in the United States to persons engaged in the liquor industry when the country "went dry." On balance I suggest that in this class of case something should be done to alleviate the burden on expropriated persons, but that they should not be put in as good a position as they would have been in if not expropriated. To this end we may make a compensation payment reckoned to yield some fraction, say half, of the income which the expropriated person would have had otherwise. Alternately we may give substantial notice of expropriation. With 5 per cent. interest a notice of fifteen years is equivalent to halving the burden.

22. Up to this point we have been contemplating the expro-

priation of property rights in particular things regarded *en bloc*. We have now to take note of the narrower kind of expropriation distinguished in section 1; namely, the removal of a right formerly enjoyed by a group of property owners to use their "property" in certain ways. Thus under the Factory Acts factory owners are forbidden to work their factories except in conformity with regulations laid down by the State as to safety appliances, sanitary arrangements, hours of labour, perhaps rates of wages. Railway companies, taxi-cab drivers and gas companies are in like manner precluded by law from making charges for their services in excess of a defined amount; shopkeepers may be compelled to close their shops at certain hours and on certain days; ships to have a Plimsoll line; railways to provide automatic couplings between their carriages; and so on. When rules of this sort are first laid down, the persons affected by them are deprived of previously existing legal rights: they are, in fact, "expropriated" in the same manner, though in a less degree, as they would be were the State to take over their equipment bodily. Consequently the case for compensation is in principle the same. Under the play of economic forces, however, the burden of rules of this kind is, in the main, after a little while, diffused away from the point of original impact through the prices of the things which those persons on whom it immediately impinges sell. Thus the cost of sanitary improvements in factories is largely spread among the consumers of factory products. Practically, therefore, compensation cannot be paid. About small things and incalculable things *non curat lex*.

23. There remains, however, one important and interesting case half-way between those just considered and the wider sort of expropriation that we were studying previously. This is expropriation of the right to charge monopoly prices. The case here is not on a par with ordinary Factory Legislation, because the burden imposed by the withdrawal of this right would not be diffused away from the monopolist. On the other hand, the charging of monopolistic prices is an anti-social act. It would seem that the conclusions of section 21 are applicable here. Partial but not full compensation should be paid; and the payment should take the form of a delayed and gradual withdrawal of the right.

24. Failing, however, a *general* withdrawal of the right to charge monopoly prices, the State, if it happens to purchase for its use a particular concern which has a high value because it has been accustomed to charge such prices, ought not to pay less than this value on account of the monopoly taint. For it is unfair that

particular chargers of monopoly prices should be singled out from the rest and compelled to suffer a special burden merely because they happen to run concerns which the State wants to buy.

25. There remains one further problem. We have discussed the expropriation of particular items within a class of property rights, and the expropriation of a class of property rights as a whole. It is held by one school of thought that the owners of all property rights—or, more strictly, of all property rights in capital goods—should be expropriated. With a policy of so wide a sweep no question of fairness as between owners of different classes of property can arise. Moreover, compensation could not be paid without creating new property rights and so, in part, defeating the intention of the expropriation. In the face of a policy of this kind there is, therefore, no place for compensation in the sense in which we have so far understood that term. There may, however, be a place for "compassionate allowances" of the sort referred to in section 11. These are payments designed, not to balance in any way the injury inflicted upon the subjects of expropriation, but to mitigate grave distress into which the economically weak among them might otherwise be thrown. If, for example, all property rights are expropriated, persons who, from age or physical disability, were unable to work and who had hitherto depended for their subsistence upon income from investments, unless the State somehow assisted them, would be left derelict. The need for compassionate allowances in cases of this kind was recognised in the decree of April 1918, under which the Soviet Government abolished inheritance whether by law or will and—apart from some defined exceptions—made the State sole heir. The decree provided that relatives who are in need, *i.e.* do not possess a minimum maintenance, and who are incapable of work, should receive support from the property left by the deceased. The amount of the allowances was to be determined by local tribunals.[1]

A. C. PIGOU

[1] Cf. Dalton, *The inequality of Incomes*, p. 292 n.

THE EFFECT OF ENGLISH BANK AMALGAMATIONS ON WORKING EXPENSES AND PROFITS

DURING the course of investigations carried out by the writer last year it became clear that no statistics had ever been prepared by individual banks to show whether or not the process of amalgamation resulted in more economic working. As joint-stock banks have been engaged in amalgamation since 1826, the omission calls for comment.

Mr. J. Dick, the banking statistician, prepared a number of tables, published in 1883, 1891, and 1896,[1] in which he showed that the expense of administering banks was constantly increasing; and in April 1897 he made the observation that "every one of the London banks has risen (*i.e.* in expenses), and there is no sign that amalgamation has done them any good so far as this part of the business is concerned."[2] This apart, however, no reference was made to the special influence of amalgamation policy on expenses, and the only other reference to it is that made by Mr. A. H. Gibson in certain statistical charts prepared in 1911. These were designed to show the effect on banking generally, of developments during the period 1885–1911; and they indicated that the banks making most progress in these years were the London and South-Western, the London and Provincial, and the Lancashire and Yorkshire. In explanation Mr. Gibson pointed out that if no account were taken of the small absorptions made by the last-named concern, none of these banks was built up, as actually others were, by the method of amalgamation. He also showed that the two first-named banks regularly increased total net profits over the whole of the period of twenty-six years, and that this was true of no other institutions. Further, as a result of the economies to be expected from fusion, those banks which had absorbed others should be expected to show gradually increased earning power. But this was not the case; partly because rates on loans and overdrafts had steadily diminished, while those on deposits had increased; investments had regularly depreciated in the period 1897–1911;

[1] *Journal of the Institute of Bankers.* [2] P. 203.

and large banks worked on much finer margins; and partly because while small banks were accustomed to keep but a small percentage of liquid assets, after amalgamation this had to be increased in order to rank with the standard of the large bank; together with the fact that bad and doubtful debts often leaked out after the fusion was completed. It will be observed that the latter part of these reasons refers particularly to the effects of amalgamation.

It is clear that Mr. Gibson was conscious that amalgamation tended to increase expenses and to lessen the margin of profits. But the exact part played by the movement is not stated. It is worth while, therefore, to endeavour to determine more precisely the full effect exerted by it on both items.

Since accurate and sufficient statistics are not available for many of the earliest and latest years—after 1826 and after 1913—the task is difficult. For this the undue secrecy which has long been characteristic of English banking methods is responsible. Of the figures which are available, however, a typical record of the relations of net profits and expenses may be obtained by glancing first at the unified balance sheets of the London joint-stock banks.

TABLE I

London Banks.

(All Percentages are calculated on Total Working Resources, which include Capitals, Reserves, Deposits, and Acceptances.)

Year.	No. of Banks.	Net Profits.	Expenses.	Percentage of Expenses to Net Profits.
1861	6	1·12%	0·74%	66%
1866	11	1·74	0·86	49
1871	13	1·33	0·72	54
1876	15	1·04	0·70	67
1881	14	1·62	0·79	49
1886	14	1·37	0·88	64
1891	15	0·92	0·68	74
1896	12	1·12	0·94	84
1901	10	1·30	1·04	80
1905	10	1·16	1·08	93
1911	9	1·02	1·18	116
1913	4	1·06	1·31	124
1914	4	0·90	0·96	107

This table reveals some fluctuations, most of which may be easily explained; for instance, the results for 1866 may be shown to have been occasioned by the speculative mania which preceded the disastrous Gurney failures, and those for 1891 by the

stagnation consequent on the Baring crisis. Again, the jump in the figures for 1913 reflected the strong trading activity of that year.

These qualifications in mind, it will be apparent that expenses increased regularly over the period, while net profits showed a distinct decline. If it had been possible to show figures for a sufficient number of banks after 1914, the comparison would probably have been more significant.

The results for all banks in England and Wales may now be cited. Since there was an absence of similarity in the methods of presenting accounts, and not a few banks which indicated net profits failed to show details of expenses, it is necessary to use two separate tables.

TABLE II

Banks in England and Wales.—NET PROFITS

Year.	No. of Banks.	Net Profits.
1874	63	1·88%
1883	90	1·67
1891	95	1·13
1896	124	1·13
1901	63	1·21
1906	—	1·07 [1]
1911	37	0·96
1913	37	1·13 [2]
1914	32	0·94
1915	32	0·86
1916	30	0·82
1917	29	0·73
1918	20	0·71
1919	16	0·69
1920	15	0·79
1921	15	0·63
1922	15	0·58
1923	14	0·57
1924	14	0·62

Taking both tables into account it is evident that net profits showed a regular decline, which was only interrupted by years of exceptional trading, *e.g.* 1913 and 1920. The very large expansion of trading and the favourable rates permitted of unusual profits in both these years. On the other hand, expenses manifestly increased as the years progressed, although the movements here are not so pronounced as in the case of the London banks alone. The explanation is that provincial firms did not find the increase to be so heavy as the more specialised

[1] Based on figures prepared by Sir D. Drummond Fraser, *Journal of the Institute of Bankers*, 1907.

[2] These and following figures are abstracted from the *Economist*.

metropolitan businesses, mainly because they controlled fewer branches, because they were not so strongly affected by prevailing interest rates (since they had more outlets for their surplus funds), and possibly because they were not so often engaged in amalgamation.

TABLE III

Banks in England and Wales.—EXPENSES

Year.	No. of Banks.	Percentage of Total Working Resources.	Percentage of Net Profits.
1883	54	0·87%	54%
1891	51	0·89	60
1896	41	0·89	77
1901	30	0·95	82
1906	23	1·08	89
1911	20	1·08	103
1912	20	1·03	94
1913	7	1·06	89
1914	8	1·02	97
1915	5	1·04	111

Although the absence of full accounts prevents the making of precise deductions, the general tendency observable in the accounts of the London banks is plainly operative over the whole field.

It should be observed that the figures for 1891 and 1896 were affected by the extremely low interest rates which prevailed almost continuously throughout the years 1891–95, and by the large numbers of branches opened[1]—when profits were small banks were impelled to extend to the "country" to seek other business. The low rates caused a reduction in the progressive increase in "real"[2] deposits, which were only £54 millions as compared with £63 millions in the succeeding five years, and £75 millions in the preceding eight years. This produced a serious reduction in the amount of total working resources (which include capitals, reserves, deposits and acceptances), and therefore a higher ratio of expenses. The accuracy of this explanation is attested by the fact that the greatest increase in expenses was shown by the London banks.

It appears that expenses increased particularly during the last forty years. The increase coincides with great activity in amalgamation policy,[3] and therefore it would seem that the

[1] Between 1891–96, 576 new branches were opened.
[2] "Real" deposits is here taken to mean actual deposits less advances.
[3] The number of groupings in this period was 279, or more than half of the total for 1826–1924.

two phenomena are not unconnected. If figures were available for later years than those actually cited, it is probable that this conclusion might receive strength. Attention may, however, be drawn to the fact that in 1919 the Bank Officers' Guild was formed with the idea of securing a higher scale of salaries and other amenities. The endeavours of the Guild have been largely successful, directly or indirectly, and salaries have been increased substantially. Since 1914, too, nearly 1,000 branch offices have been opened, and as costs of establishment have been greatly enhanced (*e.g.* rates, taxes and rents have all increased considerably), the process has resulted in greater expenses. Concrete testimony to this was exhibited in 1921, when the rates for deposit money were altered from 1½ below bank rate to 2 per cent. below. Since this is a favourite method of arranging rates, it may be presumed that such a measure was the outcome of increased expenses.

Inquiries made at banks show that no changes of importance have occurred in expenses during the last fifty years, and the opinion of banking authorities confirms this view.[1] If they have altered in amount, therefore, the alteration is clearly confined to the same items as appeared in the charges of fifty years ago. These items are :

Group 1.	Group 2.	Group 3.
Salaries.	Insurances.	Law Charges.
Directors' Fees.	Provident Funds.	Licences.
Rents.	Light and Fuel.	Tea Money for Staff.
Rates.	Other Stamps.	Auditors' Fees.
Taxes.	Travelling Expenses.	Advertising.
Stationery.	Agency Charges.	
Postages.	Telephone Charges.	

It is not customary to class interest payments as an expense.

The charges have been arranged in three groups corresponding to their respective importance. Of the whole number of items, probably the only new ones for all banks in the last year recorded were expenditure on advertising and extra insurances. Actually a certain amount of advertising was done even fifty years ago, as the columns of financial newspapers bear witness. Plainly these two items do not account for the general increase now being discussed. Also, against the increase in expenditure of these items must be set the reduction in agency charges; for the amalgamation process has reduced greatly the number of separate

[1] "Banks' expenses are to-day the same as fifty years ago, so far as the items are concerned, with the addition of pensions."—Sir D. Drummond Fraser.
"I know of no change worth mentioning in the number of items so charged during the period in question."—Mr. F. E. Steele. In letters to the writer.

banks, and therefore the number and amount of charges. This disappearance of banks has caused also a reduction in the numbers of directors[1] and auditors, while, on the other hand, fees have not been greatly increased.

The items of Tea Money, Licences, and Law Charges are comparatively so small and have apparently varied so little in the last fifty years that they may be omitted from further consideration. This reasoning shows the increased charges to be due to one or more of the remaining items. Of these the most important are Salaries, Rents, Taxes, and Telephone Charges, since it is only to be expected that Stationery expenses have been lessened as a result of amalgamation.[2] Moreover, customers are usually debited in some form or other with postages made on their account, and the remaining charges are relatively small.

Obviously, then, the extra expenses on account of these items are due mainly to the opening of branches, since these are the most important charges in branch expenditure. I have attempted to show elsewhere[3] that the rivalry generated and fostered by amalgamation was a potent cause of the swift and expansive creation of branches, and if this thesis is correct, the increased expenses may be largely ascribed to the amalgamation movement which coincided with it in point of time.

The fall in net profits also requires consideration. Beginning with 1·88 per cent. in 1874, these showed a persistent drop, both for London and the other banks, until 1913. In that year a definite gain is recorded. After 1913 the fall is resumed, to be arrested again in 1920. Both these deviations have already been discussed. The lowest point touched was ·57 per cent. in 1923, and as compared with 1874 this shows a reduction of 69 per cent.—for all banks. The reasons for so regular a decline include the fact to which allusion has already been made, that for about fifteen years there occurred the heavy depreciation in gilt-edged and other securities which bankers were accustomed to hold. This applies mainly to the earlier years, since the predominant practice of modern bankers is to make allowance for investment depreciation after net profits have been struck. The increase in the rate of income tax has also been a cause, since banks usually pay tax on the salaries of their staffs

[1] Total directors of English joint-stock banks in 1900, 1913 and 1923 were respectively 580, 423 and 390.—*Bankers' Almanack.*

[2] "Quite an appreciable one (saving) as regards stationery."—Sir Felix Schuster, in a letter to the writer.

[3] *The Amalgamation Movement in English Banking*, 1825–1924, about to be published.

as well as on profits. The competition of municipalities, discount houses, thrift and friendly societies, the Post Office Savings Bank, mill loans (especially in Lancashire), and other forms of investment, has curtailed the increase of deposits, and, taken with the strong competition among the banks themselves, has necessitated higher rates of interest. Interest is now allowed even by some London banks on current account, and on a more extensive scale than before by provincial concerns, and this militates against high profits. There is no doubt, too, that inter-banking competition has reduced commission and overdraft rates—both of which are of great importance for profits. Account must be taken of the new avenues of profit opened up by engagement in acceptance and discount business, foreign business, and trustee business; but there is no doubt that this extension of functions has proved relatively less profitable than the old and principal function of loaning. Lastly, a certain amount of weight must be given to the fact that the amalgamated banks now make larger appropriations to reserve funds and contingency funds, *e.g.* Staff Widows', Reduction of Premises, and Provident Funds of all types.

But it is not to these reasons that we should look so much as to the fact that expenses have shown a continual increase over the period. The great difference between gross and net profits shown during the last few years [1] indicates the heaviness of the burden, and the evidence of banking authorities confirms this deduction.[2] And as it has been shown above that amalgamations have undoubtedly increased expenses, they have, in consequence, reduced net profits.

J. Sykes

[1] An illuminating example is the report of Barclays Bank (the only one which now publishes details of expenses) for 1924. Expenses showed a reduction as compared with 1923, but even so, Gross Profit was £7,508,514, Net Profit £2,067,281, and Expenses totalled £5,441,223.

[2] "I think the reason why net profits have suffered is that expenses have increased."—Sir D. Drummond Fraser, in a letter to the writer.

REVIEWS

The Elements of Railway Economics. By the late SIR WILLIAM ACWORTH, K.C.S.I., in collaboration with W. TETLEY STEPHENSON. (Oxford: Clarendon Press. 1925.)

THIS new edition appeared shortly before the distinguished author's lamented death. In railway economics Sir William Acworth was our greatest pioneer. Fired with enthusiasm, despising the rebuffs which confront intrepid spirits blazing a new trail, he really evolved the science of Railway Economics in this country. Those who, years ago, sat at his feet in the little class-room tucked away in John Street, Adelphi, will not readily forget the charm and interest of his early lectures.

Few text-books were then available. There was Hadley's *Railroad Transportation*, lucid and suggestive, but concerned more with American than with English practice. There was also Colson's *Transport et Tarifs*, an acute and logical treatise, but founded almost wholly upon continental experience. *Railway Rates* by Grierson, the General Manager of the Great Western Railway, was descriptive rather than critical. Acworth, who had then just published his well-known book, *The Railways and Traders,* set himself to analyse the peculiar railway conditions of Great Britain, and to formulate the general principles which applied to them. This he did in his lectures with brilliant originality.

It was typical of those days that his attempt to do so provoked caustic criticism, even contumely and abuse, from railway officers and directors. To them it was inconceivable, indeed unpardonable, that any person who had not started life as a platform porter should presume to venture an opinion on any question connected with railways. Acworth's phrase, "railway economics," they openly derided.

From such an atmosphere, Acworth's buoyant spirit drew energy and inspiration. His early classes would comprise perhaps ten persons. Then a few inquiring junior railway officials began surreptitiously to attend the lectures. As years went on, railway officials came openly, until Acworth himself could no longer cope

with the increasing demand for information. When the London School of Economics was transferred from the Adelphi to Clare Market, Acworth's missionary work was elevated into an organised department, which now several thousand railway officers and servants attend, whose fees are wholly or in great part paid by the railway companies which employ them, and whose course of study is supervised by an expert Railway Advisory Committee, consisting of General Managers and other experts. There was nothing in Acworth's long and distinguished career of public service which gave him greater satisfaction than this conversion.

The first edition of *The Elements of Railway Economics* was really the substance of his lectures. No more than 159 pages, it was without question, before the war, the standard book on the general principles applicable to railway conditions in Great Britain. But the war created new conditions, so this second edition deals with railways during the war and during the period of post-war reconstruction. How little provision had been made for railway administration in the event of war is evidenced by the fact that on August 4, 1914, Government control of the railways was taken for one week only and subsequently renewed each successive week. No consideration whatever had been devoted in advance to the economic and financial aspects of control. This Acworth clearly demonstrates. The success of control was due, not to Government administration, but because the real control was exercised by a Railway Executive Committee, all of whom were railway General Managers or railway officers. There was little method about the basis of compensation paid to the railway proprietors. The arrangement was a compromise; the Government agreed to guarantee to each controlled company a net revenue at a rate equal to that earned for the year 1913. But, as Acworth points out, control in England, makeshift and improvised as it was, compared more than favourably with control in the United States of America. There, when the railways were taken over by the Government in 1918, the railway men, who had been responsible for their operation, were replaced by politicians and Civil servants, with—as might be expected—unhappy consequences.

With the Armistice in November 1918 came the tardy appreciation that if railways in this country were not to be nationalised, a policy which the Government refused to entertain, they must be handed back, in a workable condition, to the owning companies. The shrinkage of Government traffic after the Armistice, the increased wages bill, the introduction of

the shorter day, made it plainly impossible for the railway companies to accept the railways back from the Government and to operate them on an economic basis at the pre-war level of rates and fares. Accordingly, the Ministry of Transport Act, 1919, was passed, establishing the Ministry of Transport and empowering the Minister, pending the settlement of a national railway policy and after consulting the Railway Rates Advisory Committee, for whose establishment provision was made in the Act, to authorise the companies to charge increased rates and fares. After two inquiries by this Committee, of which Acworth was a prominent member, two increases of rates were ordered by the Minister in 1920, the last of which fixed rates at about 100 per cent. over the pre-war level, and in addition imposed a flat charge intended to cover the exceptionally increased costs of short-distance traffic, varying from 3*d*. to 1*s*. 6*d*. per ton, according to the class of traffic. But the prolonged coal strike of 1921, as a result of which railway receipts fell heavily and the taxpayer was obliged to find 60 millions sterling as a railway subsidy to cover working expenses and the guarantee of net receipts, upset altogether the equilibrium which the Railway Rates Advisory Committee thought they had established between rates and fares and net receipts. This precipitated the need for a permanent post-war national railway policy. Accordingly the Railways Act, 1921, based on a Report by the Rates Advisory Committee, was passed. Of this Act, Acworth, writing with his special knowledge as a member of this Committee, has much to say in commendation and in criticism. The Act transferred the railways back from the Government to the companies. It provided for three main purposes: (1) the amalgamation of 130 odd railway companies in Great Britain into four main groups; (2) the abolition of the old system of maximum rates and charges which had distinguished English railway legislation from that of most other countries, and the introduction of the American system of "reasonable rates," whereby a trader can at any time challenge a rate. Under this system the Railway Rates Tribunal which has been set up by the Act is to fix such rates and charges as will enable the railway companies, with efficient and economical working and management, to earn gross revenues sufficient to remunerate invested capital at substantially the pre-war rate. And (3) the Act provided conciliation machinery between the management and the men, more especially in regard to the question of wages, by establishing a National and also a Central Wages Board. To a notable deficiency in the Act Acworth draws attention—the

absence of contact between the Railway Rates Tribunal, which fixes the rates, and the Wages Boards, which fix the level of wages. Each is free to pursue its own policy without co-operation with the other—a hopeless proceeding.

The Railway Rates Advisory Committee has classified merchandise in twenty-one new classes instead of the old eight. The Railway Rates Tribunal for each of these twenty-one new classes is now proceeding to fix standard rates for conveyance, for station accommodation, etc., and for terminal services. Thus the trader will be able for the first time to calculate the total standard amount for the conveyance of a consignment of any class from one point to another. Acworth had long struggled for this principle, and he lived just long enough to see it carried into legislative effect. Another reform is the increase in the minimum rate per consignment. While in agreement with this, Acworth fought hard for the fixing of a minimum weight per wagon, as is done all over the Continent, in addition to a minimum weight per consignment. But the conservatism of the traders was too much for him. He argued forcibly that this would have conduced to greater economy of handling and, as 80 per cent. of any saving must be given to the traders under the Act of 1921, to a means of reducing rates.

Always constructive, Acworth searched indefatigably for expedients whereby railway rates can be cheapened. He did not delude himself by thinking that substantial reductions would result from railway grouping. He looked to the vigilant seizing of every opportunity for effecting less heroic economics, as, for example, by concentrating construction of stock, etc., in a few yards so as to secure the benefits of large-scale production, by a widespread introduction of automatic signalling at intermediate block stations, so as to reduce the amount of labour required, by the facing of points into level sidings in order to get freight trains more quickly away from the running line, by the introduction of continuous braking of freight trains to obviate loss of time in pulling up, and predominantly by the increase of train and truck loads so as to reduce the cost per ton of haulage, eliminate the necessity for the replacement of worn-out railway stock, and enable land now used for superfluous sidings to be devoted to other more remunerative purposes.

In the final chapter he deals with the very controversial question of passenger traffic and passenger fares, pointing out that the present passenger fares are the result of a long process of trial and error, dating back to stage-coach days. He shows, what to some will seem surprising, that the cheapened rates of

excursions, season and workmen's tickets reduce the average fare paid per passenger (of all classes) per mile to about 56 per cent. of the ordinary third-class fare per mile.

The reorganisation of the basis of railway rates and fares effected by the Act of 1921 is the most radical change yet attempted in our railway practice. A stupendous burden has been laid on the Railway Rates Tribunal, in the view of some critics, though not of Acworth, almost beyond the limits of human ability, however distinguished. The Act aims at the stability of the railway industry coupled with the cheapening of railway transport. To what extent these aspirations will be realised will be left for the next generation to discover. As yet the omens are not propitious. There was never before so interesting a field for research thrown open to the student of railway economics. Acworth has indicated with sagacity and precision the lines along which such investigation should proceed.

LYNDEN MACASSEY

Unemployment Insurance in Great Britain : a Critical Examination. By the authors of *The Third Winter of Unemployment* and *Is Unemployment Inevitable?* (London: Macmillan and Co., Ltd. 1925. Pp. 68. Price 1s. net.)

THIS short but thorough examination of the working of Unemployment Insurance by a group of independent authors of eminent abilities and wide range of opinion would in any case be of high value, and it is specially so as a corrective to the many ill-informed criticisms which are directed against the system. Its nature and objects even now are far too little understood. There is not wanting evidence, also, that popular criticism tends to increase the evils against which it is directed, and to make applicants for benefit less careful than they might be. "The applicants," said a Reading master-builder (p. 49), "want it brought home to them more clearly that the fund is one to which they have contributed and which it is to their interest to protect. The unnecessary word 'dole' should be dropped." The book itself also corrects loose ideas in regard to "extended" as distinct from "standard" benefit. "So long as contributions from the workers, the employers and the State are sufficient to cover disbursements under the scheme the recipient may justly claim that he is drawing from an insurance fund" (p. 14). Further, the interests of employers in the insurance, as a means of keeping their skilled staffs together and in a state of efficiency, is well worth emphasising.

At Birmingham, for instance, employers do not look with favour on the removal of their workpeople to other areas during temporary slackness. " They pay part of the insurance and they feel they have a real grievance when the labour force they have trained is moved to another area when conditions of a temporary nature compel them to suspend operations " (p. 18). This remark may be recommended to advocates of the promiscuous transfer of unemployed women of other occupations to domestic service.

The authors' method is one with which readers of their previous books will be familiar. They first summarise shortly the problems to be solved, and give a concise account of the working of the system, which will be specially valuable to readers studying the subject for the first time. There follow a series of investigations in a number of urban areas; and a concluding collation and examination by the authors of the evidence. The districts selected, Birmingham, Bolton, Cardiff, Glasgow, Leeds, Reading, Shoreditch and Tyneside, provide, as the authors claim, a very fair sample of industrial Britain. It is possible, however, that in some respects, notably in efficiency of administration, and in the cooperation of employers, Trade Unions and Employment Exchanges, these areas may be above the average. If so, the abuse of the Act, taking the whole country, may be somewhat greater than is suggested by the authors, but the difference is probably slight. The authors speak favourably of the Employment Exchanges. The evidence " absolves them and their officials from any charge of inefficiency in administering benefit, at all events in the urban areas investigated " (p. 64). They point out, however, that the amount of Insurance work is apt to interfere with the proper work of the Exchanges, in bringing employers and workers together, and the area reports tend to reinforce this conclusion.

The general conclusion of the authors on the question whether the unemployment benefit is liable to serious abuse or extensive frauds is significant. " It is abused," they say, " by a tiny minority, but this assuredly does not mean that large quantities of work remain undone which would have been done but for the scheme " (p. 61). They also emphasise another significant fact that, whilst complaints are not uncommon, cases of abuse which will stand investigation are rare. This is borne out by the investigators' reports. " Critics as a rule," said one, " when asked to specify a case cannot give one " (p. 30). Reference by another to a particular Rota Committee-man, as " simply a petty tyrant delighting in striking people off the benefit " (p. 24) is an interesting illustration of how evidence of abuse may be manufactured.

This experience is very similar to that of the Domestic Service Committee of the Ministry of Labour, who found great difficulty in securing real evidence to support the cases which they investigated.

The question of abuse really resolves itself into two: namely, whether the unemployed try to get benefit without genuinely desiring work, and whether they succeed in doing so. These subjects were investigated from two standpoints, from that of the persons involved and from that of the efficiency of the machinery of administration, to which reference has already been made. From both points the verdict is on the whole favourable. Generally speaking, the willingness and even eagerness of the great majority to get work confirms the conclusion reached in the autumn of 1922 in *The Third Winter of Unemployment*. This is the more satisfactory in that the fears then expressed of general demoralisation by the continuance of unemployment do not appear to have been realised. That there is an element of work-shies is admitted, but it is mostly not the creation of the system, which, as the Glasgow investigator suggests, does little more than bring them to the surface. A certain number of men, however, appear to have succumbed to the long period of unemployment, but they are comparatively few. From one or two districts, indeed, there is evidence that the good effects of the benefit have been shown in maintaining the health and efficiency of the unemployed, and so making them more readily employable. Even as it is "employers do not care to take on men who have been unemployed for a long time; they are usually out of working trim" (p. 36); but this must certainly have been far worse before the system existed, when frequently the men were badly underfed. A less satisfactory feature that is reported from more than one district, is the "tendency of employers to reduce their staffs more readily because of the existence of the Insurance Scheme."

As regards the success of the waster and impostor in obtaining benefit, the evidence suggests that the Rota Committees are not, for various reasons, in the position to make entirely satisfactory investigations, and possibly the authors do not allow enough for this. But the information as a whole supports the view that the organisation has been pretty generally successful in detecting such persons. In some districts this is very marked. Thus at Bolton "all the notorious 'dodgers' in the town have long since been eliminated" (p. 23), and even in Shoreditch, where opportunities for "dodging" appear to be greatest, it is claimed that "very rarely has any detected case been operating for more than a

month " (p. 50). It appears, indeed, that any increased abuse is found mainly in regard to Poor Law Relief and not to Unemployment Insurance. This is a strong argument for greater co-ordination of the two, and for making provision for the unemployed the sole charge of the Insurance System.

There is one point in which possibilities of abuse may be greater than is suggested in this book. So long as it is possible to offer definite jobs to applicants, the Acts seem to provide ample safeguards, and, as one or two instances quoted appear to show, may even lead to instances of undue severity. But in a depression like the present one, the possibilities of offering work are often very limited, and, where this is so, a valuable check is removed. It is possible, therefore, that there are rather greater openings for abuse, and that cases of it are more numerous than the authors and investigators appear to believe.

The difficulties which may arise in connection with certain classes are fully explored in the book. Such classes include married women, in whose case the genuineness of desire for work is specially difficult to verify; youths of eighteen to twenty-one, who not seldom receive as much (or more) in benefit as they do for wages, and casual workers. With all these there is evidence of a special problem, and it is with young workers, particularly those who have never had the opportunity of regular work, that the habit of "living on the dole" is most likely to arise. It is doubtful, however, if the suggestion made by the authors of a graduated rate of benefit between fourteen and eighteen, with the full rate as now at the latter year (p. 65), would be as effective as the alternative of a less than full rate, though with some increase over the "under eighteen" rate, between eighteen and twenty-one. At the same time, whilst there is more evidence of abuse among such special classes, the information is often very conflicting, some of it showing a very genuine desire to secure work. A satisfactory general feature of the inquiry was the emphasis it laid upon the strong desire of the respectable workman to obtain work rather than live on the benefit.

The above are only a few of the matters which are dealt with concisely and yet adequately in this excellent little book. It has many merits alike in the authors' own work and in that of their investigators. All has been well done, and one's only regret is that limits of space have not allowed a fuller treatment of the subject, notably in the summary of the provisions of the Act. But the authors have been successful in bringing out the points which specially need emphasis, and in view both of the book's

conciseness and its low price, there will be little excuse for continued misunderstanding of the nature and consequences of the Insurance System.

N. B. DEARLE

Wages and the Family. By PAUL H. DOUGLAS. (University of Chicago Press. Pp. 290.)

WE live in an experimental age, and the advocates of change find it easy to pick holes in the existing organisation, social or economic. Of late years, one method of reforming the wage system, that known as family endowment, has been very ably and persistently advocated. The basis upon which this system rests is the failure of the ordinary methods of remunerating labour to provide for the needs of the children. The standard wage is, say the advocates of family endowment, supposed to be based upon the needs of the average family. But what is an average family? A man, wife and three children? Figures show that only a small percentage of workers at any given moment actually possess a family of this size, and the result therefore is that, if the existing wage really does provide at all adequately for its needs, then every family which has more than three dependent children has less than it requires, while every family with fewer has more, and the men who have no dependent children at all—a surprisingly large proportion at any one moment—are grossly overpaid. The family endowment plan proposes that the standard wage should be based upon the needs of the man and his wife, or, better, of the worker, whether man or woman, and the woman who looks after his or her domestic requirements. An additional argument for the plan is that it helps to solve the very pressing difficulty of equating the wages of men and women: one reason for paying men more than women is that they are supposed to support the rising generation. Under the proposed scheme every worker would receive the standard wage, and would be paid, in addition, a weekly sum for each dependent child. So far all is plain sailing, but there are obvious difficulties. From what source are the children's allowances to be drawn? and by whom, and how, are they to be paid? Is the burden of supporting the new generation to be spread over the whole community?—in other words, are the allowances to be paid out of taxes, or should each industry, or each locality, be responsible for its own children? What is the cost of rearing a child?

Whose child is to be the standard? For it is clear that the sum which would suffice, and handsomely suffice, for the maintenance of the child of an agricultural labourer, living in a village, would be singularly insufficient for the child of, say, a Chicago engineer or a Harvard Professor.

The latest addition to the literature of the subject is a careful work by Professor Paul Douglas of Chicago, who frankly supports family endowment, and is apparently a believer in the desirability, if not the immediate practicability, of socialisation of the means of production and distribution.

He begins by supporting the thesis that industry does not produce enough to pay every worker a wage sufficient for the support of a family of five, and incidentally shows that the average family in the States is much more like four than five. He then goes carefully into the various European experiments. France and Belgium, Germany, Austria and Czecho-Slovakia have all tried the plan upon a fairly large scale, other countries upon a smaller. What is the result? In the first place, the numbers who come under some sort of family allowance scheme have increased and are increasing. But the European experiments are not really family allowances. They are really more in the nature of bonuses related to the cost of living. The sums paid for each child are very small, and bear no real relation to the cost of maintenance. The difficulty of preventing the employer (for the European children's allowances were initiated by and are paid by employers) from discriminating against men with families, and employing only unmarried men or married men without dependent children, has been obviated by the existing schemes, which provide for pools, formed by contributions from employers (usually upon a basis of numbers employed), and from these pools the children's allowances are paid. There are still difficulties as to firms or industries which employ a large proportion of women or of juveniles, and which consequently object to paying as large a contribution into the pool as is claimed from firms which mainly employ men. Professor Douglas also notes a tendency for married men to enter the industries which pay children's allowances, while unmarried men tend to avoid them. The French schemes, which are the best known, have been organised by employers partly in order to avoid raising wages, and partly in the hope of increasing, or at least of preventing, a further fall in the birth-rate, and of thus securing and stabilising a supply of labour. Thus larger sums are paid for second, third and fourth children. As Professor Douglas

remarks, it is only third and fourth children who mean a net gain to the population. Moreover, the plans are looked upon with a doubtful eye by Labour, which suspects them of keeping down wages, of checking mobility, and of weakening the bargaining power of the workers.

The difficulty of evolving a really satisfactory working scheme is well brought out by Professor Douglas' account of the Australian discussions. In the first place, it is extremely hard to fix a basic wage. Thrifty European housewives would be amused, but probably also scandalised by the sum, just under £200, suggested as necessary for clothing by the Union representatives before the Piddington Commission. Next, who should be financially responsible for the cost of the children? Labour wants the burden borne by the State—that is, by the taxpayer—in the hope that most of it can be placed upon the shoulders of the richer classes. Others feel that industry should support its own children. There is a further division of opinion as to whether the necessary funds should be paid by each industry—for instance, that the mining industry as a whole should support all miners' children—or by each locality. There is clearly much to be said upon both sides. Nor is it easy to provide for the children of unorganised workers—for instance, small-holders, costers, small shopkeepers. Yet the needs of their children are no less than those of miners or glass workers. Professor Douglas very honestly points out the way in which Australian Labour's enthusiasm for family endowment diminished rapidly as Labour's prospects of assuming office increased. He has an interesting discussion as to the incidence of the burden, the difficulties of avoiding the encouragement of idleness and the need for supervision of the recipients of allowances, although he fails to make clear, what is surely obvious, that an organised system of inspection must necessarily add very considerably to the cost of the scheme. He also discusses some of the other difficulties—for instance, that of unemployment. Employers can hardly be expected to pay children's allowances during a strike. But if the allowances are withheld, the children suffer, and the fundamental idea of the scheme is that children should not suffer because of the inefficiency, ill luck or idleness of their parents. Moreover, such a possibility adds very potent force to the employers' bargaining power. Again, what is to happen to the children of men temporarily unable to obtain work? These and other problems seem to us to need a great deal more hard thinking, before the plan, attractive as it undoubtedly

seems in many ways, can be regarded as really within the range of desirability, even of possibility. Upon what scale should the allowances be fixed? We are all troubled about the quality of our population, not only about its quantity. Plans which secure quantity and neglect quality cannot appeal to us, even if they are acceptable elsewhere. Professor Douglas is conscious of this difficulty, but does not solve it: its solution, indeed, is not easy. Nor does he solve, though he does consider, the economic problem which is equally urgent. If, as most of us believe, the average wage is related to the average standard of comfort, and that standard usually includes the desire for children, then how will earning power be affected by the existence of children's allowances? Most of us are as lazy as we dare to be. If under the new plans we need only earn the basic wage, which *ex hypothesi* is lower than the usual standard-of-comfort wage, are we likely to exert ourselves to earn the amount over and above that wage out of which children's allowances are to be paid? I fear it is improbable. A rising standard of comfort tends to increase earning power, a shifting of responsibilities to diminish it. No one wants the hunger of the children to be the only incentive to earning, for we all know that despair leads to danger rather than to efficiency. But is it not more upon the lines of true progress to work for increased standards of comfort, increased efficiency, increased earnings and thus for a real growth in the admittedly insufficient national dividend, than to attempt redistribution upon lines which seem likely to diminish the incentive to earn? We all want improved distribution. The difficulty is to evolve a method which at the same time increases production. So far the advocates of family endowment have not proved that their plan will meet the case.

LETTICE FISHER

The Tenure of Agricultural Land. By C. S. ORWIN and W. R. PEEL. (Cambridge University Press. 1925. Pp. viii + 76. 3*s*. 6*d*.)

THE drastic proposal which constitutes the *raison d'être* for this little work is based upon one fundamental assumption, viz. that the English system of landlord and tenant-farmer has definitely collapsed. The title of the remedial measure put forward by its authors momentarily affords ground for the conclusion that they are in agreement with one or other of the two political parties advocating nationalisation; the latter, however, have different objects in view, and would proceed upon divergent lines.

Before discussing the scheme in detail, it may be permissible to suggest that the above-mentioned assumption is not yet irretrievably established. Has not private landlordism weathered other serious (and more protracted) economic storms within the last few decades? Should it be condemned and its functions assumed by the State after a relatively short period of tribulation and when, moreover, the countryside already exhibits signs of recuperation? Is it proved that any considerable number of landowners are failing, wilfully or from necessity, to meet their financial obligations? Nor is it as if the policy of the State for upwards of forty years had not been directed towards strengthening the position of the tenant; the "three F's," for instance, no longer provide the latter with an effective rallying-cry. Many readers will hesitate before endorsing the opinions of Mr. Orwin and his coadjutor on such points as these, but there is, of course, no question as to their sincerity, and their plan is put forward as a considered attempt to ameliorate the position of all three parties in agriculture. They themselves modestly describe its provisions as merely forming a basis for discussion. It certainly merits the closest investigation, and, if their contentions are proved right, there may eventually be no alternative to nationalisation in some such form.

The book is divided into five chapters, rather more than half its space being devoted to an historical account of former proposals (ranging from the theories of eighteenth-century writers, such as Spence, to the provisions of the Finance Act of 1909–10) and to a statistical analysis of the use and distribution of land in recent times. These sections call for little comment, but one may question the phraseology of the statement on p. 17, that "a very large acreage of land is already in public, or semi-public, ownership," since the figure in question represents about three per cent. of the area under crops and grass. Again, does the fact that the number of holdings owned, *or mainly owned* (these latter, and important, words are omitted), by their occupiers has increased from eleven per cent. to twenty-three per cent. during the last six years really afford "proof of the silent revolution" going on in rural England to-day? Is there any assurance that this movement will continue unabated, and does the process itself necessarily imply "the passing of the great landowner"? It would be interesting to know what types and sizes of farm have principally been acquired, and from whom, and whether many new-comers have not invested money gained during the war in realty, as has always been the case after similar events in the past.

When the details of the scheme are investigated, one finds that it is intended to be applied (*a*) to England and Wales and (*b*) solely to agricultural land. The exclusion of Scotland under (*a*) enables the special problems associated with the ownership of land north of the Border to be avoided. Under (*b*) it is claimed that by the compulsory acquisition only of " agricultural lands and other forms of property falling *outside* all administrative urban areas," the undertaking would be immensely simplified and its cost reduced. Although a recent Act of Parliament may have defined an agricultural village, there exist innumerable areas which are to all intents and purposes urban in character, although still classified as rural by the Local Government authorities. The extension of modern means of transport has raised the value of large tracts of such land above an agricultural level, and, as lands " supposed to possess a prospective building value " would receive a ten years' moratorium to permit of development, it is certain that a very large proportion of all property earmarked would evade acquisition. Conversely, it is probable that urban areas contain more land devoted to farming than is anticipated by the authors. Thus, Geary in *Land Tenure and Unemployment*, p. 184, quoting H. of C. Paper 119 of 1913, refers to Rhondda, where 19,888 acres, out of a total of 23,885 within the Urban District boundary, are rated as agricultural, to Bradford with 14,534 out of 22,843, and even to Birmingham with 20,000 out of 43,000. The State is only to acquire the surface rights, leaving minerals in private hands; such a policy would involve complicated negotiations in many parts of the country. No acreage limit is mentioned, and, as the only exemptions comprise lands associated with public utility services, commons, churchyards, and vicarage houses (a specific reminder being inserted to the effect that properties of the Crown, County Councils, Charity and Church lands are scheduled for purchase), it must be intended to expropriate the holders of quite small plots; thus, many cottagers, the occupiers of residential properties and the owners of semi-urban gardens will alike swell the enormous total of individuals with whom negotiations must be initiated. As the avowed object is to acquire control over all farm properties, a more reasonable and expeditious method would have been to purchase only that land which figures in the annual returns of the Ministry of Agriculture. Owner-occupiers are to be offered the option of a tenancy for the term of their lives, of the lives of their wives, or of the survivors of them, or, alternatively, for a period of years. The interest of leaseholders would be bought out side by side with

that of their ground landlords, since in the case of buildings the present value of the reversion would be assigned to the latter and the remainder to the former.

When the most important question of all, finance, is reached, one finds that a little more than two pages disposes of this immense problem. The valuation itself is referred as " a mere matter of arithmetic," Schedule A assessments forming the basis for what, " at the present moment," would represent twenty-two and a half years' purchase. The figures mentioned, namely, £1,125,000,000 as the capital sum, and £50,000,000 for annual value, are admitted to be the result of guesses, but the majority of readers will not endorse the statement that " the financial side of the problem is not one which should present difficulty," nor will they designate it " a relatively small transaction which should cause no embarrassment." It should be stated that the stock created, redeemable by a deferred sinking-fund, would bear interest " comparable with the yield of long-dated Government stocks." No further information is accorded, nor is any attempt directed towards drawing up a composite balance sheet or gauging the effects of this vast loan. The ability of the State to maintain its newly acquired property indefinitely at the high standard postulated, whilst at the same time conforming to its financial obligations, is tacitly assumed. The possibility of rural land values falling is ignored, but it must be observed that, until the State has become absolute owner, it will be dependent upon the price-level of agricultural commodities to maintain its rents. The necessity for providing additional money to make good the remission of death duties and the extinction of the land tax is apparently not admitted. Incidentally, both tithe and copyhold tenure are spoken of as if they were not at present the subject of legislation. A hard-and-fast valuation system, based solely on present cash rentals, would present many anomalies when applied to properties acquired, respectively, before, during, and after the recent depression. Indeed, static conditions are assumed to prevail in future years, since no reference is made to anticipated changes in cash rents, with the corollary of under- or over-payment of the present owners. It is even questionable if Schedule A is a uniformly equitable basis for compensation in the case of a fen farm, a plot of land in a market-gardening district, or a large light-land estate in Norfolk. In this connection the examples of private sales quoted on pp. 69 and 70 are not very helpful to the general argument in favour of State purchase.

Considerably more space (eight pages) is devoted to a precise description of the administrative measures proposed and of the personnel to be created. A new Branch of the Ministry of Agriculture would be established to act as intermediary between the Board of Inland Revenue and the County Councils, for these latter bodies would be dominant in their own areas. County, and under them, District Land Agents, each with an area of 30,000 acres, would be appointed, and County Foresters would supersede the Forestry Commission; we read of admission to the administrative posts by examination, of grades in the clerical staffs, of temporary assistants, and of "considerable staffs of workmen of all kinds." All this savours of an expensive bureaucracy, the activities of which, in the opinion of most farmers, would more than cancel any advantages derived from absolute security of tenure.

The last section enumerates the gains and losses which, it is claimed, would follow the inauguration of the whole scheme. The only loss anticipated—the gains are those put forward by other advocates of nationalisation—is that from the yield of the stamp duty on transfers of rural property.

Such is the plan. It avoids certain fatal objections, from an agricultural standpoint, which attached to previous schemes. It does not, for example, seek to impose a standardised control over actual farming methods, nor does it aim at the creation of a universal system of small occupying-owners. Tenant-farmers, the bulk of rural dwellers and the majority of land-owners will trust that the necessity for putting this, or any similar proposal, into force will not arise. If external circumstances forced its application, they might legitimately call for a reconsideration of the extent and type of land to be acquired, and might demand greater elasticity in the valuation system. Economists, together with the general body of taxpayers, will certainly ask for an amplified explanation of the finances of the measure, for, as matters stand, there would appear to be very grave risk of the Exchequer being called upon to make good, *ab initio*, a heavy annual deficit, with the probability of increasing liabilities. All classes will join in thanking most cordially Mr. Orwin and Colonel Peel for producing a very readable book, which contains much valuable material and, were that needed, affords further evidence of their solicitude for the well-being of English agriculture.

J. A. VENN

Die Umschichtung der Europäischen Vermögen. By RICHARD LEWINSOHN. (Berlin: S. Fischer, Verlag.)

THIS is a very interesting attempt to determine the redistribution of private property caused by the war and the subsequent economic and political vicissitudes of the various States of Europe. But, while the whole of Europe is dealt with, the more interesting and more fully worked out portion of the book is that dealing with Germany. The writer carefully distinguishes between national loss and national redistribution. For instance, the fact that there was a reduction of 45 milliards of gold marks in the deposits of Savings and other Banks does not mean that there was necessarily a national loss to this extent. The Banks advanced the bulk of this money on mortgage and were repaid the amount in worthless currency, but what was lost by the depositors was gained by the borrowers who freed their estates from mortgage. The writer estimates the total national loss at far lower figures than is done by the school of Helfferich. He considers the loss through the surrender of Alsace Lorraine, Upper Silesia, Posen and Danzic, all economically very valuable territories, at about 10 per cent. of the total pre-war wealth, against which in calculating the *per capita* loss one must, of course, allow for the reduction of population, and he calculates the remaining losses through the Versailles treaty and the Ruhr occupation at about 8 per cent. This works out into enormous figures, but yet far lower than those of the so-called national economists, who do not realise that a great deal of their so-called loss is merely redistribution. The redistribution has been far-reaching and must seriously affect the future economic, social and political conditions of the country.

In describing the inflation and the subsequent stabilisation the writer proceeds on orthodox lines, but lays a good deal of stress on the changing mentality of the public. During the war it did not in the least suspect that there was inflation. Mr. Cannan pointed out in the December, 1921, number of this JOURNAL that very few people grasp the idea of a rise or fall in the value of their own country's money, but this was rendered specially difficult in Germany during the war by its complete isolation and by the loss of the sense of value caused by there being always two prices in the market, the official maximum price, always admittedly too low, and the clandestine price in the *Schleichhandel*, often ten times higher and universally regarded as excessive. The public, noticing that commodities varied widely

in price but that a mark always remained a mark, was willing to accept the Government contention that the high prices were due to genuine scarcity without noticing that this should have led, but did not in fact lead, to a contraction in the effective demand. It was only after the Armistice, when the public saw a gradual and continuous fall of the mark in the quotations in the foreign money markets, that it was realised that there was inflation, and those who drew the right conclusion were the first to profit. There was only one sure and safe way of making money, and that was to borrow and to repay later in more depreciated currency. Those who had security to offer never had any difficulty in obtaining credit. As the Banks could always re-borrow from the Reichsbank, which even in 1922, when the mark was only 1 per cent. of its pre-war value, kept its rate at 5 per cent., they freely lent at rates which seemed high, as they allowed for some protection against depreciation, but the allowance was always, of course, ridiculously inadequate. Those that borrowed always gained and, if wise, invested their profits in actual utilities. Those who tried more complicated methods mainly failed. Many, observing that with the fall of the mark there was a rise in share values, and remembering that, in the past, shares went in boom times to far beyond their intrinsic values, speculated for the rise and came hopelessly to grief. Many of these speculators belonged to the official salaried or to the fixed income class, and speculated not so much with a view to profit but in the hope that the rise in shares would compensate for the increase in the cost of living. In this they were quite mistaken. Though shares went to what appeared to be fancy prices, they never, in fact, rose to anything corresponding to the depreciation of the mark or to the increase in the cost of living. In 1923, calculated on a gold basis the cost of living was ten times the pre-war rate, while share values, calculated also on a gold basis, were only one-sixth of the pre-war price. Contrary to all precedent, the longer the boom lasted the greater was the devaluation of securities, and, oddly enough, the depreciation persisted even after stabilisation and after legislation enabled companies to wipe out on very cheap terms all prior debentures and bond charges. It may be added that many foreigners took a hand in this speculation and came badly to grief.

The regulations of the third *Steuernotverordnung* of February 1924 must be regarded as the ultimate settlement of this economic revolution. They decreed what was tantamount to a complete repudiation of all Imperial, State and Communal loans. The

nominal amount involved was enormous, but the actual figures of effective loss are difficult to arrive at, as the later and larger loans were subscribed for when there was already considerable depreciation. In this connection the author points out that as the English taxation pump did not exist in Germany, the Government had to invite subscriptions to fresh loans not merely to finance themselves, but also to get back some of the depreciated currency and restore some value to the mark. This repudiation represented an entire loss to investors mainly of the urban middle class, who favoured this type of investment, though patriotism no doubt led other classes to invest in the later loans. These later loans were applied wholly to unproductive war expenditure and represent a national loss borne solely by investors. The repudiation of the pre-war loans was, however, a clear transfer of wealth to the Reich, States and Communes, especially to the last, as their loans were mainly for works of road improvement or for works of primary sanitary importance. The same regulations fixed the price for the redemption of mortgages at what roughly amounted to an immediate payment of 8 per cent. (nominally 15 per cent. commencing in 1932) of the pre-war value. Though both rural and urban mortgages had this favourable treatment, the profit went quite disproportionally to landowners, who, through the high prices ruling for agricultural produce, could always compensate themselves for mark depreciation, whereas urban owners found that the Rent Restriction Act precluded their obtaining any but the most minimal income from their properties. This led to a crisis in the urban house property market, and at one time large apartment houses did not fetch the price of decent carpets. Those who profited by this price revolution were those who had the courage to sink capital in the purchase of real estate. Foreign capitalists took a considerable part in this speculation and came out very well. It was officially estimated that in 1921 one-quarter of the house property in Berlin was in the hands of foreigners, and this led in 1922 to restrictive legislation. In the main foreigners were content with reasonable profits and soon got out, but the Swedish Match Trust is specially mentioned as having made very large gains in the purchase of business premises in Berlin which it did not resell till the autumn of 1924. The same Regulations also fixed the price of the redemption of debentures and other fixed prior charges of industrial companies at what roughly amounted to the immediate payment of 10 per cent. of their pre-war value, and, in view of the investing habits of the country, this legislation, favouring the

shareholder at the expense of the bondholder, transferred a sum calculated at five milliard gold marks from the small to the big investors.

The tendency in all these legislative enactments was to throw the loss as far as possible on the urban middle class, which by tradition avoided speculation and invested in Government securities or mortgage or prior lien loans at fixed rates of interest. Along with the feudal aristocracy they were the real Conservative force in the country and they have disappeared. No doubt a new urban middle class has arisen, but it has quite different instincts. It has the inflation mentality, having become rich not by saving but by borrowing. The present trouble in Germany, usually ascribed to a want of capital, is really due to a want of credit. Every form of capital, including even raw materials, exists in adequate quantities. The difficulty is to finance industry, due to a reluctance to lend except at exorbitant rates, and then only for short periods. This is a legacy of the inflation mentality, which, however, at least in one way, has proved useful. When Renten marks were introduced it was doubtful whether the amount issued was sufficient for trade requirements. The public, however, continued the practice of inflation days, of getting rid of the notes as soon as they got them, and the rapidity of circulation ensured the sufficiency of the issue. It took some years to get into the mentality of inflation and it will take some years to get out of it.

If the urban middle class suffered most, the rural middle class has had the greatest benefit. At the moment it is suffering from the difficulty of obtaining the long credits customary in German agriculture, but it has freed itself from mortgage, and the surrender to Poland of the rich agricultural districts in the east is a clear advantage to it. Very different is the position of the feudal aristocracy. It was most powerful in the east and its most influential representatives were settled or had important interests in Upper Silesia. Half the superficial area of Upper Silesia was owned by fifty-one families and no less than a quarter by six, and the surrender of the eastern half of Upper Silesia to Poland, which has been drastic in its treatment of the annexed territories, has had far-reaching results. It should also be remembered that the great landowners in the Baltic provinces, in Bohemia and Austria, who have all been ruined by the thoroughgoing agrarian reforms in those countries, were all branches of the German aristocracy and widely interconnected by marriages and community of interests, and their ruin has indirectly meant very serious loss.

Moreover, though the Weimar constitution was anything but harsh, the provisions as to the surrender of portions of the estates for colonisation, even though they have been imperfectly carried out, and even more as to the dissolution of entails, are inevitably weakening the influence, political and economic, of the landed aristocracy. The same is true of the dynastic families, who were also very large landowners, for though the German Republic has been lenient and has avoided copying the methods of Bismarck when he dealt with the estates of the King of Hanover and the Elector of Hesse-Cassel, the compensations paid do involve a very considerable loss. The Americanisation of industry seen in the rise of a long list of new leaders of the Otto Wolf, Stinnes, Herzfeld and Michael type, whose adventures in finance are humorously criticised by the author, is destroying the last bulwark of Conservatism. These new and mainly self-made men are supplanting the old established family concerns such as those of the Krupp and the Stumm family, connected through marriage and interests with the governing class. The Stumm family has been established for nearly two centuries and has furnished many ambassadors and dignitaries holding high office in the State. The new men have the jobbing instinct and do not even seem to wish to appear to be working for permanent ends. It is true that they are the protagonists of vertical instead of merely horizontal trusts, but when we scrutinise the list of the 1535 legally distinct companies in which Stinnes was interested, we find them mostly wholly disconnected and must assume that his interest in them was purely speculative and that, as events since his death have proved, it was quite ephemeral. There may be a new Nationalist or even Imperialist Germany, but it will be different in type, as the Conservative characteristics of the old Germany have been much weakened. The author deals on similar lines with the rest of Europe, and shows that in varying degrees the same forces are at work. In those countries in Central and Eastern Europe where the feudal landowners were racially different from the mass of the population, the agrarian revolution has been far more violent and the influence of the aristocracy has virtually disappeared. On the other hand, where the depreciation of the currency has been less severe the middle class has suffered less. The Americanisation of industry is visible in varying degrees throughout Europe.

The book is brightly written and, even when we differ from the author, we feel that he gives us much material for thought.

ALBERT BALL

Der proletarische Sozialismus ("*Marxismus*"). By WERNER SOMBART. Vol. I, *Die Lehre;* Vol. II, *Die Bewegung.* (Jena: Gustav Fischer. 1925. Vol. I. Pp. 488; Vol. II. pp. 523.)

THE history of this work is worth recording. In 1896 Sombart published in a slender volume the eight lectures on Socialism which he had delivered at Zurich. So clear, attractive and sympathetic was the treatment of the subject that the book quickly went through several editions, and each was amplified by the author. The third appeared in 1899, and the fourth, running to 100 pages and a Chronology of Social Movements in the nineteenth century, came out in 1901. Four years later the fifth edition was issued—practically a new book of 278 pages and Chronology of the Social Movement. It was divided into two parts, the one dealing with the doctrines of Socialism, and the other with Social Movements. In 1908 the author brought out the sixth edition, enlarged once more to 344 pages. The book had by this time been translated into every European and several Oriental languages: the English version which the present writer prepared for Messrs. J. M. Dent was from the sixth edition. The seventh and eighth editions appeared in 1919 with a chapter on Bolshevism; the ninth edition was a reprint of the eighth. Now comes the tenth edition in two large volumes and a completely changed presentation.

In his early days Sombart was a close student of Marx and prided himself on his having given up a good portion of his life fighting for Marx. It has been said that Sombart first introduced Marx to the world of economic thought in Germany; the influence of Marx on Sombart's *magnum opus*, *Der Moderne Kapitalismus*, is apparent both in his attitude to the problem of Capitalism and in his attempt at a solution. In the early editions of his book on Socialism his treatment of Marx while critical was clearly sympathetic. But the younger Sombart, who, because of his interest in working men, was never advanced to an ordinary professorship at Breslau, has gradually developed into the Sombart of to-day, the successor of Schmoller at Berlin, the Prussian Privy Councillor; and Paul has become Saul. He has not a good word to say for Marx; his criticism is savagely destructive and markedly ungenerous. Marx himself, Sombart declares, was a failure; his family " sick in soul and body." Engels was no Socialist; had he not sold his soul to Marx he would have developed into a typical bourgeois.

The change of view is remarkable. A man who prided himself

on being a modern of the moderns is heard in these two stout volumes bemoaning the evils of the times, and longing for a return to the mediæval social groups and to the agrarian organisation of society. But it is the old Sombart speaking. He has changed his views but he has retained his method. Those who come to this work for an elaboration of Socialism as the creed of a political party will be sadly disappointed: Sombart indeed never once clearly defines Socialism as an economic problem. But they will be attracted by his skilful analysis of ideas; by the abundance of fertile suggestions, many of them quite obviously incorrect, but none the less stimulating; and by the excellent practice, well known to the readers of his other books, not of giving references to chapter and verse in his authorities, but of quoting in full the passages on which he relies. These two volumes will thus become a veritable mine of information for those who are interested in the history of Socialist doctrine.

A careful examination of the volumes will show that they are based on the previous editions, in many instances even retaining the actual wording. But the elaboration of the problems has been so extensive that without doubt Sombart has written a new work, full of suggestion, provocation and stimulation, which for importance will probably rank with his treatise on Capitalism. He is particularly instructive when he deals with the theory of the Class Struggle, and he traces down to the present the forms taken by that struggle in the principal countries of Europe, not omitting the influences of the Great War, and especially in Russia. His study of Bolshevism is fascinating: whether it is scientific or true is another matter. The same criticism may be levelled at the work as a whole. Yet there are some exceedingly instructive sections here and there. Sombart's sketch of the causes which may be held accountable for the rise of what he terms Proletarian Socialism in the forties of the last century is exceedingly well done. In a few lines he paints the economic and political conditions in Western Europe, shows how they were alike and how they differed in England, France and Germany; and wins the confidence and gratitude of his readers by quoting extracts from contemporary writers.

Nevertheless in reality Sombart is here not the economist but the philosopher. He has attempted to write a new Philosophy of Socialism in order, as it would seem, to show that there is nothing good in it, because, among other reasons, Dostoievsky said that atheism is the main doctrine of Socialism. This argument may give some indication of Sombart's method. An indica-

tion of his prejudices may be found in his dogmatic assertion that, where the soul of a German appears in its fullness and purity, it is the soul of a believer. It is difficult to bring these two statements into accord, for if Socialism be atheistic in its nature, and your true German a creature of faith, how is it that there are so many millions of German workmen who are professed Socialists? That question Sombart never attempts to answer. He is apparently not concerned with practical questions. In these two volumes his aim, it would seem, is to influence men, as St. Augustine sought to influence them, "to seek true rest, which is God."

M. EPSTEIN

Some Causes of the Present Stagnation of British Trade. By R. G. GLENDAY and A. L. PLEASE; with an Introduction by R. T. NUGENT. (Federation of British Industries. 1925. Pp. 31, with two charts. 1*s*.)

THIS brief report sets out in condensed form, with the minimum of argument, the conclusions reached by two members of the staff of the Federation of British Industries in an investigation into the factors affecting British trade in the post-war period. In his introduction the Director of the Federation seeks to emphasise both the novelty and the importance of the contents of the report, and he invites advice and criticism especially from those "whose knowledge and experience have been gained in other spheres than that of industry." Several difficulties, however, present themselves at the outset to those whose opinions are thus eagerly canvassed.

Firstly, the significance of the long array of statistical tables and charts, which occupy one-half of the whole 31 pages, is nowhere clearly expounded. It is difficult to gather whether the tables were drawn up first and the conclusions in the report deduced from them, or whether they are inserted merely as corroborative evidence of the truth of results reached otherwise. In either case there is need of critical examination of the suitability for the purpose in hand of the numerical records cited and of the probable bearing of their well-known defects on the conclusions they support or which are sought to be based upon them.

Secondly, there are no clear statements concerning the meaning of certain terms and phrases of a semi-technical character coined by the authors; and, again, in a paragraph towards the end of the report there is a discussion concerning movements

in *home* prices and in *world* prices where, apparently, *home* prices are identified with food prices and *world* prices with the prices of industrial materials. It is difficult to grasp the point here, especially as the countries compared are Great Britain on the one hand and Canada and the United States on the other. Is the price of wheat a *home* price in these countries and that of pig iron a *world* price, or are these prices *home* prices in one country and *world* prices in the others? Probably the authors have in mind a comparison between price changes in the case of raw materials and in the case of manufactured goods in different countries in the world; but one can only guess at what the paragraph is meant to imply.

The chief point raised in the report is the relation of foreign investment to the course of the external trade of the investing country; and the suggestion is made that British industry requires considerable remodelling in order to meet the new situation that has arisen in consequence of our inability to continue exporting capital on the same scale as in the pre-war period. On the assumptions made the conclusions set forth are correct enough; but they do not possess either the novelty or the originality claimed for them in the introduction. In recent economic literature there may be found more than one study on the lines pursued in the report, and the more elementary conclusions reached are among the commonplaces of students of the theory of international trade. The real significance of such a report depends upon the assumptions made. These the authors ought to have expressly stated and to have discussed with very great wealth of detail. Was the pre-war period, of which the year 1913 is taken as type, one in which the British industrial system had reached a position of stability likely long to endure, but which was rudely overthrown by the events of the years 1914–18? Had the relative shares of home trade and of foreign trade in the aggregate total of our commercial activity become irrevocably fixed in 1913? Was our foreign trade to continue at the same level in volume and in value and be ever the same in kind? Was "remodelling" unnecessary then, or was there, even at that date, undue delay in the adaptation of British industry to changing circumstances? And, if so, to what extent were financial interests responsible for the continued maintenance of some of our industries at levels of activity no longer justified by the general economic position? The answers to these and similar questions are a necessary preliminary to further study of the very important issues raised

by this report. Considerable help will doubtlessly be afforded by the volumes promised in due course by the Committee on Industry and Trade; but, meantime, the staff of the Federation ought to continue the good work they have begun. It is an omen full of promise for the future that British men of business are beginning to abandon narrow conceptions of trade and industry and to take broad and long views concerning the serious economic problems confronting them.

J. G. SMITH

The Return to Gold. By T. E. GREGORY. (Ernest Benn, Ltd. 1925. Pp. 60. 2s. 6d.)

The Present Position of Banking in America. By T. E. GREGORY, with an introduction by WALTER LEAF. (Oxford University Press. 1925. Pp. 40. 2s.)

The Return to Gold is apparently the first of an " International Series " of books on modern finance " for Bankers, Business Men, and Students," edited by Dr. Gregory. As such, it is expository rather than propagandist, and there is little in it to excite that heated feeling which has long been considered appropriate to currency discussions. It is admirably lucid, and Dr. Gregory is to be congratulated on having attained to a style which makes it much easier reading than some of his earlier work.

The first chapter brings out the immense strength of gold when established as an international money, the value of which cannot be very much affected by any nation acting singly. The second, " How we got off the Gold Standard," deals with a period of which the secret history has not yet come out. The early part of it was a hectic time, summed up in the story of a high official running hard along a corridor and shouting to would-be button-holders, " Don't stop me, or the King's assent will be given to six Bills which haven't been brought in! " The probability is that the Currency Note went very quickly through three stages: first, it was to be an emergency issue to meet a temporary run for cash; then a means of drawing actual gold coin from the pockets of the people and storing it away to impress all who think that an unused cellarful of gold is the sinews of war; lastly, an engine for enabling the Government to spend more pounds than it otherwise could, regardless of the pound's diminished purchasing power. The chapter, in spite of its title, includes how we got back on to the gold standard. This part of the story suggests that one maxim of a modern British statesman is, " Always keep on hand a departmental committee: when it

is tired of its reference, you can get it to recommend any course you want to adopt in regard to some subject not referred to it." We may doubt whether the importance of South Africa's decision is fully emphasised in Dr. Gregory's colourless statement that it "had already decided to revert to gold." Probably it was that decision which gave the final push.

In the third chapter Dr. Gregory, while making it clear enough what our present standard is, leaves us in some doubt as to the most convenient name for it. In the title he calls it "the new gold standard," which, as the standard is neither a country nor a college, cannot be more than a temporary makeshift. But in the text he says, "we possess a gold standard, but not a gold currency. In other words, we have adopted that particular currency system which is known as the Gold-Exchange Standard." I think the implied definition of the gold-exchange standard system as one where there is a gold standard but no gold currency is misleading. No one says the United States is on a gold-exchange standard, but eagles and half-eagles are as little in active circulation there as sovereigns and half-sovereigns here. Gold coin is legal tender here as much as it is there. The only difference seems to be that there a person who goes to the right place can legally demand gold coin for as small an amount as five dollars in paper, whereas here he must first collect £1700 in paper, and then the Bank of England need not give him gold coin, but only a bar containing an equivalent amount of gold. This unimportant difference does not seem to justify the application of the term "gold-exchange standard," which has other associations, and has never been very satisfactory, as the "gold" in it was some foreign currency based on gold, rather than gold as such.

In his last chapter Dr. Gregory tries to delve into the future of gold prices with all the caution of a prudent prophet.

The pamphlet on American banking is of a more specialist type. Both the author and Dr. Leaf are afraid the Federal Reserve system may become political. It seems to me a little optimistic to suppose that the regulation of currency with a view to stability of prices (as opposed to ordinary banking business) can ever be non-political, or indeed that it would be well performed if it were entrusted to a body of non-political bankers. The best hope of mankind is in making it world-politics, and consequently steadier as being removed from the vagaries of local politics. Imagine the condition of things in the United States if each State had its own dollar!

EDWIN CANNAN

Le Lotte di Lavoro. By PROFESSOR LUIGI EINAUDI. (Torino: Gobetti. 1924. Pp. 277. Lire 10.50.)

IN Italy Professor Einaudi has a high reputation for lucidity. His writings are never swollen with verbiage and his occasional articles on current economic problems have for many years been one of the features of the *Corriere della Sera.* In this book he brings together a number of such articles, all dealing, directly or indirectly, with labour questions, and mostly reprinted from the *Corriere.* Their dates of publication range from 1897 to 1919. It is a mixed bag: ephemeral narratives of industrial disputes, short essays on the relations of capital and labour and of their respective organisations, reflections on Socialism, rough sketches of ideals, sympathetic reviews of certain English economists.

In his Preface, looking back across the gleanings of nearly thirty years, Professor Einaudi finds that his guiding principles have not changed. He still feels "an invincible scepticism and almost a physical repugnance" towards projects of improvement based on State interference or legal regulation, and "a lively sympathy for the efforts of those who try to help themselves and in their efforts fight, fall and rise again, learning at their own cost to conquer and to better their lot." This, in his view, is the Liberal attitude. "A business man is a Liberal when he believes in his own spirit of initiative; he is a Socialist when he begs for a protective tariff from the State." Professor Einaudi is no industrial pacifist. The title of one of his chapters is "The Beauty of Strife," and he speaks with admiration of the tenacity of the British Trade Union movement. Strikes and lock-outs are "means of testing economic equilibrium." He is no advocate of arbitration, believing that outside arbitrators are generally ignorant of the facts of the case and are often influenced by base political motives. "Equilibrium reached by discussion and by strife is superior to that imposed by external authority." Further, industrial disputes have greater educational value for the parties concerned, and, "so long as equilibrium endures, it is necessary that it should be continually threatened with the possibility of change." Sooner the sharp sword of Damocles than the sleepy Dove of Peace! This is an unusual doctrine in these days, but it is, perhaps, a healthy corrective to current obsessions with "the rights of the public" and to exaggerated estimates of wealth lost through occasional stoppages of work. Monopolies, Professor Einaudi thinks, are transitory things, unless compulsorily kept in being by the State, an opinion which runs counter to much modern evidence. "The necessary condition

of advantage to the community, both present and future, is not the effective existence of competition, but the legal possibility of competition." This surely is too simple an attempt to make the best of both worlds, that of ideal competition no less than that of real monopoly. He is opposed to "industrial parliaments," such as are advocated from time to time by hazy thinkers desirous of "bringing capital and labour together" and relieving political parliaments of their responsibilities for industrial legislation. Such industrial parliaments, he argues, cannot even represent all relevant present interests; much less can they represent the "interests of the future, which it is the chief task of the State to defend against the interests of the present."

In his criticisms of Socialism he lays special stress upon the problem of saving. He is right in saying that Socialists have paid insufficient attention to this problem, in print at any rate. He notices the possibility of collective saving, out of taxation, but confesses once more his own "profound and invincible scepticism." It is doubtful, however, whether the crude blunders, committed under the high pressure of hostile surroundings, by Russian and Hungarian Bolsheviks, throw as much light as he imagines on what might be expected to happen in Western communities under more manageable conditions. Whether or not a vigorous policy of collective saving of this type would, in fact, be adopted, obviously depends upon the state of opinion. If the economic need for such provision was widely and vividly realised, it would be made; if not, not. He says nothing of another possibility, namely, a large measure of "self-finance" by Socialised industries, the germ of which is visible already, not only in many municipal enterprises, but in the undistributed profits of capitalism. The development of this idea was one of Rathenau's most valuable contributions to economic thought, which has not yet been sufficiently taken into account by economists.

A long and friendly review of Smart's *Second Thoughts of an Economist*, and of his life and work, leads on to a discussion of the "joy of work" as an ideal and to a quotation from Professor Pigou's epilogue to *Wealth and Welfare*, which has, to the regret of at least one of his readers, been omitted from successive editions of the *Economics of Welfare*. "This page of Pigou," says Professor Einaudi, "superb in its classicism, represents, as in a piece of sculpture, the difficulties and the attractions of the mission which one generation after another has attempted and still attempts to fulfil."

HUGH DALTON

Die Zukunft der deutschen Handelspolitik. Vol. I. By BERNHARD HARMS. (Jena: Gustav Fischer. 1925. Pp. x + 376 + 127.)

THE Treaty of Versailles deprived Germany for five years of the freedom of movement in regard to commercial policy. The binding period came to an end on January 10, 1925, and Germany is at present in the throes of a struggle for a new commercial Tariff. The existing Tariff dates back to 1902; its effects on German economic life during the twelve years before the war were accounted eminently satisfactory. That Bülow Tariff aimed at protecting with an even hand both industry and agriculture; and the achievements of German agriculture during the war, in sustaining a population of some 68 million people cut off from the world food supplies, is pointed to with pride by German politicians and economists.

But the 1902 Tariff will not serve in the existing state of the world. More and more it becomes evident that a wave of protection has swept over both hemispheres, and it is necessary to have an object for bargaining in order to obtain "most-favoured-nation" treatment. Besides, the German customs are relatively lower than those laid down in the newest Tariffs of the majority of European countries. The time is thus ripe for a new German Tariff, and since Germany urgently needs secured foreign markets, the problem presses. Last September the well-known "Verein für Sozialpolitik" placed this matter on its Agenda at the conference held in Stuttgart, and Professor Harms, of Kiel, read an illuminating paper there on the subject. That paper has been expanded into two volumes, the first of which has just appeared.

With characteristic thoroughness Professor Harms reviews the history of German commercial policy from Bismarck to Bülow, dealing with Tariffs and their results; and, what is perhaps of more importance to the economist, gives a useful résumé of the history of opinion concerning the great problem of Free Trade *v.* Protection. All this is but preparatory to a proper understanding of the burning question of to-day, and to an elaborate study of that Professor Harms devotes the greater part of his book.

Some few dominating facts govern the situation. Germany's foreign trade shows an adverse balance. Calculated on the basis of pre-war prices, German exports have shrunk to about one-half, and German imports to some 62 per cent., of their respective pre-war level. Yet under the Dawes Scheme Germany has undertaken

to make large payments to the Allies, payments which, as everybody realises, can only come from a favourable trade balance. Nor is this all. The Germans claim that their domestic industrial products are heavily taxed, and the suggestion has been heard that some compensation might be obtained by putting a tariff on foreign products. Then there are the German farmers, who have long been accustomed to favourable treatment in German Tariff policy. Can Germany feed herself? How will the prices of German-grown grain compare with those prevailing in the world markets? The general assumption is that for some considerable time to come the price of corn everywhere will be high. But German politicians are convinced that Germany will profit only by low prices. Moreover, if prices are raised artificially by means of tariffs, there would be an outcry on the part of the great middle classes, and it may be that a plebiscite will be necessary to settle the question of the new Tariff policy. All this will take time; whereas a Tariff ready to hand is an urgent necessity.

The problem is thus involved, and opinion upon it in Germany greatly divided. Economic guidance is very much in place, and it may be said at once that no better guide may be found than Professor Harms. His book deals entirely with German conditions and is intended for German readers. But all those who in other countries are interested in Tariff policy will probably find sidelights upon it which may be of value for their own special problems.

M. EPSTEIN

A Groundwork of Economics. By J. JOHNSTON, M.A., Fellow and Tutor of Trinity College, Dublin. (Dublin: The Educational Company of Ireland, Limited. 1925. Pp. 112. 2*s*. 6*d*. net.)

THE claims made for this small work seem to me slightly exaggerated. They are, (1) that "it is an attempt to give a full-blooded exposition of the great dynamic conceptions of Economic Science," and (2) that the outlook of the author, as an Albert Khan Travelling Fellow, is "cosmopolitan as well as national." This second claim is no doubt based on two passages referring, the one to the skinning of beasts in Chicago stockyards (p. 33), the other to the wages of Chinese coolies on the Yang-tse river (p. 55). But the fact is Mr. Johnston's work is peculiarly national in its outlook. The author, writing as an Irishman for Irishmen, has chosen his illustrations from Irish conditions.

This choice of Irish illustrations is the one distinctive feature of a book which, as an elementary exposition of economic principles, is inferior to many others of its kind. Mr. Johnston treats of far too many subjects in the course of his hundred small pages. His work is too slight and discursive to prove serviceable as an introduction for the University student, and too arid to stimulate the interest of the general reader in economic theory. It might, however, be useful to the Commercial Departments of the Irish Technical schools, especially of the Country Technical Schools, which play so important a part in the Irish educational system. They have long wanted a small work of this kind.

J. LEMBERGER

Everyone's Economics. By ROBERT JONES. (London : Sidgwick and Jackson. 1924. Pp. 304. 5*s.*)
The Principles of Business Economics. By J. STEPHENSON. (London : Pitman. 1924. Pp. 496.)
Elements of Economics. By S. EVELYN THOMAS. (St. Albans : The Donnington Press. 1924. Pp. 649. 10*s.* 6*d.*)

THESE three books are evidently the concessions of three authors to the feeling of irritation which we all experience from the shortcomings of other people's text-books. I cannot think, however, that their appearance will seriously strengthen the hands of those not yet guilty who are fighting the temptation to produce text-books of their own.

All are orthodox; none is original, though Dr. Jones' has much higher claims in this respect than has either of the others. Unfortunately Dr. Jones has sacrificed a full half of his space to Appendices containing collections of quotations from other people's works, and bald summaries of the text (such as lists of the six advantages and five disadvantages of the division of labour). The purpose of these, which is to give the reader an idea of the divergent points of view that exist on many points, is laudable; but somehow the Appendices are too much condensed to achieve their object. The text of the book is much better. It is lively and well-written, and if you have strength of mind enough to leave the Appendices alone, you may be stimulated to think for yourself and not leave Dr. Jones to do all your thinking for you. The text tells simply about the nature of wealth, the division of labour (one of the reactions of which is pleasantly described as " the creation of helplessness "), the uses of money and the working of the exchanges. It sets forth the orthodox theories of value and

of rent, and ends with a short chapter on public finance. The weaknesses of the book are perhaps accounted for by the fact that the author, as he himself states, has tried to write both for "everyone" and for the examination student. Anxiety for the success of the latter seems to have limited the service that he could have rendered the former.

The other two books are much larger, and, I cannot but say, very dull. Mr. Stephenson has tidied everything into its proper place. You can learn from him a list of the chief features of nearly everything, from a cartel to each of our three principal political parties, and you can find the pros and cons of a great many things (*e.g.* seven "methods of industrial peace") set out in tabular form. You can learn that there are ten kinds of debentures, ranging from the naked to the perpetual variety. The author is to be envied for his confidence and certainty; not so his readers. Educationally the book is vicious; though for that current conceptions of business education are no doubt more to blame than is Mr. Stephenson.

Mr. Thomas writes somewhat on the same lines, though "not quite so much so." He has something of the same fatal gift for classification. Unlike Mr. Stephenson, however, he is theoretical (covering the marginal theory of value and distribution) as well as descriptive, though there are descriptive chapters on money and banking and public finance. Moreover, he is more definitely "tendencious" and has views, *e.g.* about the proper sphere of State activity or the purposes for which taxation may or may not be imposed, which he is not afraid to express, though in excessively dogmatic fashion. This is a mitigation.

BARBARA WOOTTON

Labour's Alternative. By EDO FIMMEN. (Labour Publishing Co. 1924. Pp. 128. 3*s.*)

THIS is an interesting little book by an author who, as secretary of the International Transport Workers' Federation, has wide knowledge of working-class policies throughout a great part of the continent of Europe. Its main thesis is that competition, even in the international sphere, is rapidly giving place to combination. The author sees a double movement in progress. First, the capital of Western Europe and America, in response to a kind of new "Drang nach Osten," is penetrating the smaller States of Eastern Europe, as witness the large measure of French control over the Polish textile industries, and the Schneider-

Creusot interests in Hungary, Yugo-Slavia and Rumania. This is called the colonisation of Europe. Second, European capital is busy developing industry in colonial areas proper, as in the East and West Indies and in Africa. Such areas are no longer looked upon chiefly as sources of raw materials, but are now places where "labour and hunger can be turned to the account of capital" in industrial production more easily than at home, where there are perhaps more Trade Unions and less hunger.

In this process the owners of capital are credited with a very high degree both of unity and of purposefulness. Their action is seen as a definite and deliberate attack upon working-class standards which can only be met by equally strong and united Trade Union organisation. Unhappily, however, international Trade Union organisation, as Mr. Fimmen has no difficulty in showing, presents a striking contrast to the supposedly serried and well-disciplined ranks of employers, being weak and disunited in the extreme, and torn by rival "Red" and "Yellow" factions.

The early part of this book contains matter of some real value, showing the ramifications and developments of certain well-known firms. There is perhaps something also in Mr. Fimmen's idea of the "Drang nach Osten"; something also in the view that powerful economic interests cross national boundaries and shape political action to their own liking, when they are intimately connected economically, and geographically close together, as *e.g.* French and German heavy industries about the Ruhr district. But one swallow does not make a summer. The combinations which Mr. Fimmen enumerates are imposing; but they leave a vast area of genuine competition. (Incidentally, the Communist writer, Bogdanoff, whose book is reviewed on p. 625, takes an exactly opposite view from Mr. Fimmen, and says: "On the world market, and that is what the capitalist market really is, competition remains for the reason that, owing to the antagonism of interests, agreements between large capitalist units are not usually made, and if they are made they burst like soap-bubbles.") Further, Mr. Fimmen makes the common mistake of ascribing to the organisation of the "other side" all the virtues which he knows to be lacking on his own. One can imagine the *Morning Post* writing of the power and deliberate iniquities of the very international Trade Unionism whose weakness Mr. Fimmen deplores in exactly the same language, and with as little justification as has Mr. Fimmen's account of the forces of international capitalism.

BARBARA WOOTTON

The A. B. C.s of Business. By HENRY S. MCKEE. (New York: The Macmillan Co. 1922. Pp. 135.)

"IT is characteristic of the American mind to love the simple, direct and practical way of doing things." It is certainly characteristic of the author of this book from which the foregoing sentence is taken. The book is as complete and unquestioning a defence of unadulterated *laissez faire* as could well be imagined. "Economic law" is supreme (though occasionally violated by perverse and ignorant man with deplorable consequences), and where it reigns, all is almost incredibly right with the world in general and American business in particular.

Mr. McKee explains how the tendency of competitive production (competition is assumed throughout) is to follow effective demand, and draws the inference that "about the proper amount" of everything is produced. Except for "occasional instances of unmerited injustice, poverty and failure are Nature's gifts to ignorance." "The natural laws of industry . . . invariably compel every man and every industry to pursue a course in the interest of the public welfare." Whether, in a society having an unequal distribution of wealth, effective demand truly reflects social need; whether unmerited injustice is not more than occasional; and whether there is *never* any conflict between the interest of private profit and public welfare are matters which he does not discuss.

Mr. McKee shows the reactions upon production of interference with the natural course of prices (such as rent control or restrictive legislation regarding railways), which, being in violation of economic law, cannot, in his view, be measures conceived in the public interest. He explains with remarkable lucidity what money is and does (including its occasional excesses), and how the use of money tends to obscure the working of the simple economic principles of all societies in which an individualistic economy co-exists with elaborate division of labour and exchange. He shows exactly how and why a community is impoverished by turning aside from peaceful production to the manufacture of war materials. He explains and blesses the speculator; gives a somewhat superficial account of the alternation of periods of good and bad trade, for which last the cure is rigid economy and hard work; and ends with two remarkable chapters on internationalism and on education. The former accounts for the existence of independent political States by the statement that "the world is divided for the sake of convenience into business areas." The

chapter on education advises us never to permit untrustworthy information to enter our minds (if we can help it), and to avoid books which are not written by a "really respectable authority on the subject." This last is bad advice if only because it would prevent many from reading Mr. McKee's own book, which is well worth reading both for its exceptional vigour and lucidity (the writer has a very real gift of style) and for its exposition of a point of view which seems to be common in America and not unknown here.

BARBARA WOOTTON

A Short Course of Economic Science. By A. BOGDANOFF. (Labour Publishing Co. 1923. Pp. 391. 5*s.*)

LIKE many other works of a Communist complexion, Mr. Bogdanoff's treatise is open to objection less on account of the fallacious matter that it contains than for the reason that, in its English dress at any rate, it is almost unreadable. The translator's preface states that this book has served as a text-book in "hundreds if not thousands" of Communist workers' study circles in Russia; and it is hoped that it will serve the same purpose in this country. The hope is exaggerated. At most the faithful may buy some few copies of the English edition, more from motives of loyalty than from love of its contents.

However, once the reader has become accustomed to the perpetual use of such adjectives as "organisational"; to such phrases as "the inherent relations of capitalist society give rise to a tendency for capital increasingly to develop the productivity of labour"; and to the constant resort to unnecessary arithmetical illustrations which are one of the most irritating legacies of the Marxian tradition—he will do well to struggle with Comrade Bogdanoff's pages, if only to see that there is no monopoly of wisdom among the orthodox, or of folly among the Communists. Indeed, to the academic economist perhaps the most remarkable thing about this book (*pace* the author, who would doubtless deny this) is the surprising fewness of its essential points of difference from the typical academic text-book.

Comrade Bogdanoff begins with an historical (and prehistorical) survey of the origins and growth of modern industrial society. His introductory matter on the economics of primitive people is reminiscent of the inevitable Crusoe chapter at the beginning of orthodox introductions to economics, being about as general in tone, and, I should think, not appreciably more or less

accurate. His anthropology is doubtless often wrong; at least he does not seem to agree with Sir James Frazer on matters on which presumably Sir James is better qualified to speak than he. Further, there is an absence of proportion and of dates, which is only too common in quasi-historical introductions to economic theory by writers of all political complexions. Primitive man hunted; "then" came agriculture; "then" the feudal system; "then" the growth of towns and craft guilds, etc., etc. You have to hunt very far to find out "when." Otherwise the general historical setting of this book gives a view which does not seem more than averagely misleading.

In theoretical matters Mr. Bogdanoff expands the labour theory of value, together with disquisitions on surplus value which are pure Marx, and include the untenable doctrine that the rate of surplus value or profit enjoyed by the capitalist depends upon the proportion of variable capital expended in wages to the constant or fixed capital in his business. His description of how actual prices fluctuate about the normal value of any commodity is almost exactly parallel to orthodox exposition of the part played by cost of production in determining normal value. The same is true of his account of the flow of capital to different uses in accordance with the attraction of relative profits. And the theory of rent is also expounded almost, though not quite, on unimpeachably correct academic lines.

The real differences between Comrade Bogdanoff and the orthodox school are twofold: first, he does not appear to have any understanding of, or place for, a theory of interest. This is fundamental and probably due to a constitutional inability to understand interest, which is not always confined to Communists, though it is almost universal among them. It makes a big hole in his doctrine and leads to curious diversions of theories which otherwise start very well (*e.g.* his central theory of value). Second, Mr. Bogdanoff writes in a language of exploitation which readers who are unfamiliar with it may have difficulty in interpreting.

In one important matter I should like to suggest that orthodoxy has something to learn from the Marxian school, of which this book is an example. The classical theory of value and distribution indicates certain "factors of production"—land, labour and capital—and shows how these jointly "produce" an article whose value is then distributed on certain principles among its "producers." This theory has a meaning and, properly understood, has not, so far as I am aware, been shown to be false. But

it involves a ludicrous use of language which more than anything else drives common-sense persons into the arms of Marx. Nowhere outside economic text-books do inanimate objects like land and capital "produce." When a fire is extinguished no one dreams of saying that the firemen contributed so much, the fire-engine so much, and the water so much to the final result. The firemen did it with their appliances. It is equally reasonable and natural to say that workers alone "produce." We cannot afford to neglect the inevitable associations of words, even though by careful definition we may be able to defend the strict logic of our position. Is it too late to hope that economic orthodoxy can find a way of expressing a doctrine of real importance in terms which do not prejudice the world against it by an exasperating outrage of the ordinary use of language?

BARBARA WOOTTON

The Panjab Peasant. By M. L. DARLING. (Humphrey Milford. Pp. xxii + 290. Price 14*s*.)

AGRICULTURE must always remain the principal industry in India, and as such deserves all the attention and study that can be given to it. *The Panjab Peasant* is a notable addition to a much too scanty literature. Confined to the Panjab only and dealing primarily with one aspect of agriculture, it is exceedingly thorough and illuminating. To quote the author, the book is "primarily a study of agricultural debt. But it is also something more." It seeks "to give some idea of the peasant himself in all his varying conditions of heat and cold, drought and flood, river and waste, abundance and want."

The first chapter is largely statistical and is intended to show the extent of indebtedness and its distribution among the various types of cultivator. Only 17 per cent. of the proprietors are not in debt, of which 45 per cent. is mortgage debt. Total debt averages Rs. 31 per cultivated acre and Rs. 76 per head of the cultivators. The amounts do not seem very great at first sight, but for India they are heavy, especially when it is remembered that most of the debt is unproductive.

Chapters II to VII are devoted to a detailed survey of different districts which are grouped according to economic and geographical conditions, especially in relation to water supply, communication and alternative methods of employment. The effect of these varying conditions upon the character of the people is discussed, and one is almost led to think that environment

is everything. But this tendency is guarded against by considering the reaction of the different races to their surroundings. Thus "The Meos, too, of Gurgaon are notoriously lazy and thriftless. The Ahirs, on the other hand, in the same district surpass even the Jats in industry, frugality and skill. One explanation of these violent contrasts in character is that adversity either strengthens or weakens." But whatever the region or the people —and both are exceedingly diverse—the outstanding fact is indebtedness. These chapters are without doubt the most valuable, as they force one to realise very vividly how dangerous are generalisations even when confined to one province. The conditions in the canal colonies will be found especially interesting and deserve careful attention. The causes of indebtedness are summarised as—

(1) The smallness of the holdings and excessive fragmentation.
(2) Constantly recurring losses of cattle.
(3) Improvidence aggravated by insecurity of crops.
(4) Extravagant expenditure in marriages, etc.

And borrowing is made easy by—

(1) The money-lender and his system.
(2) The expansion of credit due to high prices and the rise in the value of land.

Agricultural progress is discussed and some useful comparisons are made with Japan. Lest one should think this progress of too slow growth, the reader is reminded of the great obstacles to be overcome. The overwhelming control of Nature; the anarchy of pre-British days: both accentuating the fatalist creed of the people. But "Kismet is no longer quite the fetish it was." The War has made the Panjab soldier peasant think. Those who went to France saw a village life which made their own look drab, and they are wondering if improvements cannot be made. Again, the two great movements through which salvation will come, if it comes at all, are very recent. The Agricultural Department was only founded in 1906; the Co-operative movement in 1904. Considering all things the advance has far exceeded expectations.

Through the whole study the problem of growth of population is present. Whatever the environment the evils are accentuated by the too rapid growth of numbers. Even over the prosperous canal colonies the threat of overcrowding broods and darkens what are otherwise high hopes.

To the author the great hope of salvation lies in co-operation, through which alone the people can be taught self-help and lifted out of their present condition. The story of the development of the movement is told briefly and brings much solid comfort to what, in spite of its interest, would tend to be a gloomy story. This faith is held equally strongly by all who are engaged in directing and fostering the movement elsewhere in India, so that we can accept it without reserve. "Sun-dried bureaucrats" are not usually given to undue optimism. The book is intensely interesting throughout and is obviously the result of a long, intimate and first-hand acquaintance with the people, for whom the author has a real affection; as who could not who knows them? Would that we had more of its kind.

W. S. THATCHER

Economic Conditions in India. By P. P. PILLAI (Routledge. Pp. xviii + 350. Price 14*s*.)
Population of India. By BRIJ. NARAIN RAMA KRISHNA. (Lahore. Pp. v. + 212. Price unstated.)
The Wealth of India. By P. A. WADIA and G. N. JOSHI. (Macmillan. Pp. xi + 438. Price 21*s*.)
Financial Developments in Modern India, 1860–1924. By C. N. VAKIL. (P. S. King. Pp. xxix + 640. Price 21*s*.)
Wealth and Taxable Capacity of India. By K. T. SHAH and K. J. KHAMBATA. (P. S. King. Pp. xxi + 347. Price 15*s*.)

THERE are two outstanding difficulties in writing on India. The vastness of the country, the diversity of peoples and the different conditions under which they live and work make generalisations of little value—a fact which is gradually being realised. The second is probably due to the peculiar position of the country, whose policy has hitherto been largely dictated by the British, that is, the very strong political feeling which Indian writers find almost impossible to exclude from what ought to be scientific works. Politics, like King Charles's head, will make their appearance, with the result that a large number of writings degenerate into mere journalism and propaganda.

In the present case only the first two authors have steered clear of these rocks. Mr. Pillai's *Economic Conditions in India* is a real contribution to the study of Indian economics and well worth the attention of serious students. The book is divided into three parts. The first is devoted to a brief sketch of the

economic conditions in India prior to the advent of the British, and the conclusion is reached that

> "A survey of the main economic tendencies in India throughout the last three centuries . . . shows us that . . . the environments created by the State were such as to depress and discourage productive effort of all kinds. . . . The conditions of the ryot and the artisan were miserable in the extreme. . . ."

The slow growth on modern lines is attributed to the feeble development of the indigenous manufactures and the inability to adopt Western methods of production. The claim that India was once a great manufacturing country whose industries were deliberately strangled is brushed aside as inadequate. But while the author disagrees with much that has been written, he points out that it was symptomatic of the revived interest in industry and also that it helped to strengthen the determination to create a modern industrial system. Such a system he believes to be necessary if India is to prosper and take her proper place in the world : the more so as the pressure on the land is becoming too intense. This leads on to Part II, which is devoted to Agriculture. The facts brought forward are well known, but make instructive reading, as they are well grouped and the conclusions drawn are sober and judicious. The conclusion is that agriculture must always remain the staple industry and that it must be run on modern and scientific principles if the standard of living is to be raised and the raw materials forthcoming for the new industries. Part III deals with industrial organisation. One feels it is inadequate, but this is due to the space at the author's disposal. A brief survey of existing conditions is followed by chapters devoted to special industries which are too short to add anything new to one's knowledge. The labour supply is dealt with in a useful manner, and the hope expressed that India may avoid the great mistakes which we have made in the past and that the lot of the Indian workman may be a happy one.

The other writers have little or nothing to contribute, except perhaps the lesson of how not to do it. Prof. Narain's book on population, however, contains many statistical tables which will be useful to students who cannot obtain the Census reports. To this is added a certain amount of comparative data drawn from Europe. He discusses the question of over-population, and leads one to the conclusion that he thinks India is over-peopled having regard to the present methods of production.

There is a chapter entitled " Organised Industries and Socialism " which seems unnecessary. While lacking originality, the book will prove useful, especially to Indian students. Professors Wadia and Joshi also deal with the question of population, but consider it is " amusing to be told that India is over-populated." The reasoning upon which this judgment is based is interesting and shows an incapacity for clear thought which unfortunately is apparent throughout the whole work. The scope of the book is rather wider than that of Mr. Pillai's and throughout the treatment is ineffective. One good point is the emphasis which is laid upon the necessity for safeguarding the welfare of the workers. The legend of a prosperous pre-British India crops up from time to time and becomes a little monotonous.

From this we pass to *Financial Developments in Modern India,* which makes very dreary reading. One is tempted to feel that however bad our finance may have been we did not deserve such a punishment. Finance tends to make dull reading, but this is unrelieved gloom. Not once does Mr. Vakil allow that we did the right thing or adopted the right policy. Nor does he allow that many of the problems were exceedingly difficult of solution. The book is mere journalism, though it shows considerable capacity for reading blue-books.

Lastly we come to *Wealth and Taxable Capacity* by Mr. Khambata and Professor Shah. The introductions are not promising. Mr. Khambata is, to quote Professor Shah, confined entirely " to statements of facts," while the opinions emanate solely from Professor Shah, who does " not pretend to any modesty or diffidence "—nor would, we think, to any knowledge of economic principles. Mr. Khambata's contribution is found in Book I and is a useful piece of work. Part I is a discussion of the meaning of the terms " wealth " and " income " and how they are to be calculated. It is sound and will prove very useful to students. Part II is devoted to an estimate of India's wealth and income. Such estimates are always exceedingly difficult to make even when the data are comparatively abundant. In this case one feels that the writer has an impossible task, though he has acquitted himself very creditably. The treatment is sound and there is much very useful matter.

Book II is valueless. Professor Shah evidently subscribes to the full communistic faith. Capital and the capitalist are evils he hopes will some day disappear. In dealing with the net income of the people he would deduct not only all Government

taxes, but also Postal, Railway and Irrigation charges, on the grounds that "the individual has practically no option but to pay the charge fixed by the State if he wants the service." Why he does not include all payments for goods or services bought it is difficult to understand—"one has no option but to pay" for most things unfortunately. "Home charges" come in for the usual criticism; so also do Indian princes, though it is comforting to know that the Indian rulers also waste India's money. It is also interesting to note that "all those engaged in transport and trade, in the administration of public affairs and in the liberal professions are really parasites."

W. S. THATCHER

Selected Subjects in the Economic History of South Africa. By M. H. DE KOCK. (Capetown: Juta & Co., Ltd. 1924. Pp. vii + 475. 15*s.* net.)

DR. DE KOCK undertakes in this volume the "task of presenting an analytical and synthetical survey of the history of the economic development of the territories now comprising the Union of South Africa." Economists who have had occasion to peruse the other three volumes (*The Finances of the Union of South Africa, Government Ownership in South Africa,* and *Ekonomie en Finansiewese van Suid Afrika*) which this same author has published since 1922 will be not a little surprised by the rapidity with which this new undertaking has been completed. While "in general . . . the essentials of a text-book have been constantly kept in mind," "in view . . . of the limited demand for such a book from purely academic circles, the needs of Government officials, politicians, teachers of history and others interested in South African history or economics have also been taken into consideration." In these purely academic circles the author's Foreword is hardly reassuring.

The book is intended to cover the whole period from the arrival of the first Europeans in South Africa until the date of going to press; in fact, Dr. de Kock does not hesitate in places to discuss the future and to disclose the intentions of General Hertzog's Cabinet. Economic historians, however, will find most useful his treatment of the history of the Cape from 1652 till 1795 under the administration of the Dutch East India Company, particularly in reference to the system of land tenure. He ascribes the growth of the trek habit to the prevalence throughout the eighteenth century of the system of granting loan leases of one year's duration

for pastoral purposes, making it easy for the farmer to move on at the end of the year. In spite of two attempts to encourage more permanent occupation of the land, one in 1732 introducing quit-rent tenure with fifteen years' security and compensation for improvements, the other in 1743 offering permanent tenure of about 125 acres on perpetual loan with power to sell or bequeath the property, the loan lease system still operated for five-sixths of all the occupied land when in 1813 perpetual quit-rent tenure was instituted. Other information of interest is contained in these first 84 pages, but its value is much reduced by the complete absence of any references to its sources. Readers who are sufficiently well acquainted with the publications of McCall Theal and the Van Riebeeck Society to recognise the source of much of this interesting matter, and of the map of the settlements in 1795, will not doubt the accuracy of Dr. de Kock's work, but they will join with the less well-informed readers in wishing that all the sources had been indicated in order that some opportunity might have been afforded for the exercise of the historian's all-important function of weighing evidence.

The second part of the book, continuing the history to the present day, is more seriously marred by the absence of references to sources, and lacks the saving feature that gives interest to the preceding section. All the historical and statistical information given is readily accessible to any student of South African affairs who has five shillings to invest in the Official Year Books of the Union. The arrangement of the chapters corresponds broadly with the sections of the Year Book, and almost without exception the phraseology and the presentation adopted in that publication have been retained. The officials of the Census department will probably tire of such continuous flattery by an author who omits to acknowledge his indebtedness either in the preface or in footnotes to the text. On the other hand, economic historians will find fault with a method of arrangement which fails to bring out the connection between mining and transport, between agriculture and land policy, and between foreign trade, tariff legislation and industrial development. Each subject is confined strictly to its chapter. Dr. de Kock does not seem so happy in the purely historical sections, as when urging the desirability of increased protection (pp. 296–9), criticising the commercial banks (p. 385), explaining the policy of the present Government towards Provincial finance (p. 409) or proposing solutions for the "poor white" problem (pp. 464–7).

In his preface the author promises a revised and improved

edition in August 1929. We suggest that it would have been better to make that edition the first, and to encourage his students in the meantime to make use of the official publications.

ARNOLD PLANT

The Rise of the Irish Linen Industry. By C. GILL. (Oxford: Clarendon Press. 1925. Pp. vii + 359. 16*s.*)

INSPIRED by the late Professor Unwin, English economic historians have been exploring minutely the organisation of our industries in the period of transition from the domestic to the factory system. Their research has produced valuable intensive studies of the metal, the cotton and the woollen industries. The task of describing (in so far as Ireland was concerned) the early history of the third textile industry fell to Mr. Gill. Mr. Gill, though he offers us a full account of the rise and fall of the Linen Industry in Southern Ireland, has directed his painstaking investigation mainly to the economic history of Ulster. His work is distinguished from that of his predecessors by his detailed treatment of two subjects, hitherto either neglected or handled inadequately—the change from domestic to factory production, particularly in Ulster, and the State's various efforts to foster the Industry in Ireland, as a whole.

In treating of the period before the coming of the factory, Mr. Gill has succeeded in accumulating much useful information, though he has been unable to draw upon stores of new material, comparable to those which enrich the pages of Professor Heaton and Mr. Ashton. But the arrangement of what facts patient and even infinitesimal research could discover has been skilfully performed. The chapters in which Mr. Gill traces the rise of new industrial classes in Ulster consequent upon the expansion of the market, the various commercial developments and the gradual spread of capitalism, present an elaborate picture, ingeniously constructed by the cumulative effect of a hundred adroit touches. Yet I feel that they give too favourable an impression of the progress made in the organisation of the Linen Industry, throughout Ulster as a whole. The sober truth is that the Linen Industry (certainly before 1820) exhibits in Ulster, apart from the three districts in which the finer cloths were made, a very primitive type of organisation, with a body of workers, whose economic status it is not always easy to determine. Mr. Gill knows this, of course, and even draws attention to it occasionally. But throughout these chapters, in his endeavour to show the rise of

new industrial classes, the growth of capitalism, etc., he takes all his instances from the three districts mentioned. Yet the changes in these districts were far from being characteristic of Ulster as a whole. Then in stating his conclusions he tends to forget the restricted area from which he has drawn his facts. For instance, the trouble of 1762—the issue of a few pamphlets and a small riot at Lisburn—showed merely that in one small district of Ulster a class of employees had appeared. According to Mr. Gill, however, it showed in the history of Ulster "that the old system of domestic manufacture and sale in open markets was gradually yielding to new methods and that a drift towards capitalism had begun." (Mr. Gill has so fond an affection for this trouble of 1762—the one "striking" event in the early history of the Ulster Linen Industry—that he loses his sense of proportion. In one passage he speaks of it as suddenly revealing "the forces that have been remoulding society." In another connection we hear that it was "only one event in the age-long rivalry between commercial and industrial capital, in line with the Matins of Bruges and the Ciompi rising in Florence!")

Chapter XIV (Growth of Capitalism, 1800–1825) furnishes other examples of a weakness for indulging in conclusions broader than the evidence admits. Consider, for instance, the statement that "in the linen trade as a whole and in almost every section of it there was already before 1820 a strong movement in the direction of *modern capitalism.*" Mr. Gill uses capitalism in this chapter in the special sense of *factory production* (in earlier chapters he uses the term in a different sense). The evidence for the statement is as follows. Four scutching mills were ordered for use in Ireland in 1817. The practice spread in the next three years, but Mr. Gill does not furnish figures before 1820. There were fifteen spinning mills, all working on a very small scale and by water power. There were no power-looms at all, though there was an occasional instance of the concentration of hand-looms under a single roof. But what reason have we for talking of a strong movement towards factory production, at any rate, in the very important coarse branches of the Industry? Mr. Gill appeals, too, to various reports on the brown linen markets, but here he shows some confusion of thought. These reports afford evidence bearing merely on "employment for wages." This employment was usually employment in the home of the worker. The reports tell us nothing significant about the point with which Mr. Gill is concerned, "employment of wage-earners *in factories.*"

Mr. Gill has considerably extended our knowledge of the

industrial and commercial organisation of the Irish Linen Industry, and particularly that of Ulster in the period of domestic production. An additional chapter, dealing in detail with the Ulster Industry during the period between 1820 and 1850 would have greatly added to the value of his book.

The four chapters in which Mr. Gill seeks to estimate the value of the State's activity in encouraging the growth of the Industry form not only the most interesting, but the most notable contribution made by his very useful work. While other writers have been content to talk loosely about the good work done by the Linen Board and the beneficial effects of the bounty policy, Mr. Gill, with indefatigable industry, has conducted a rigorous and comprehensive inquiry into the question. His verdict, supported by a formidable array of evidence, skilfully marshalled, is decidedly unfavourable both to the Linen Board and the Bounty system. It is a verdict which, on the whole, I am inclined to accept. Yet Mr. Gill, as a faithful disciple of the late Professor Unwin, seems to write with a strong, though perhaps unconscious, bias. This is shown not so much by any specific misrepresentation of fact as by a subtle distribution of emphasis and an apt selection of illustration. Mr. Gill is firmly convinced that " those industries which have prospered would have done so without any help—the Linen Industry of Ulster is a case in point."

The general excellence of Mr. Gill's work is marred by two unfortunate habits. He is inclined to avail himself, somewhat freely, of facile analogies (drawn from a study of secondary authorities) which appear to suit his immediate purpose. These are often interesting, but the scientific value of the practice is doubtful and, without careful analysis, it may even mislead. We could spare, too, Mr. Gill's many vague remarks on general economic history—the " crambe repetita " of the lecture-room.

In sum, Mr. Gill has produced a work which is at once a dispassionate survey of an important aspect of Irish Economic History and a scholarly contribution to the study of industrial development.

J. LEMBERGER

Then and Now: Economic Problems after the War a Hundred Years Ago. By MRS. H. A. L. FISHER. With an introduction by the RT. HON. DAVID LLOYD GEORGE, O.M. Pp. xii + 117. (Oxford University Press. 1925. 5*s*. net.)

THIS book gives a short account of the economic conditions and problems of the period after 1815, the " then " of the title. It goes over the old ground conveniently, neatly, without attempting

new theories or presenting the results of new research. It gives a history compendious and readable, in such a manner that while hearing of the then we are led to think of the now. We are asked to learn the lesson of history. Wisely the author does not explicitly enumerate what lessons are to be learnt; the book contains no positive recommendation to legislators; the chief conclusion which all readers will draw is that as we lived through and emerged prosperous from those troubled ancient days, so we shall do again and recover from our present sickness. In fact this work serves more than anything else the purpose of encouragement, gives a fillip to flagging energies, brushes away the clouds of gloom; it should be placed in the hands of every average pessimistic man.

There is, however, one cause for disquiet. The careful reader will find that in three out of the four principal problems discussed—the rural, urban, financial and currency—the solution of our difficulties is said to have come through our steady progress towards free trade. From this we may infer both a lesson for the present and a criticism of Mrs. Fisher. The lesson for the present is obvious and serious. But, important as the benefits that flowed from our fiscal policy undoubtedly were, the author seems to stress them rather at the expense of other topics. In the rural chapter she treats admirably of the corn law and its repeal, but hardly mentions the Poor Law Reform Act. More might have been said of factory legislation, of workmen's combinations, and the repressive policy of post-war years.

There are a few minor inaccuracies. The reasons given on p. 98 for the rise in the price of bullion (1797–1800) are inadequate. It should have been observed on p. 60 that the real objection to Pitt's method of borrowing below par was that it deprived the future of opportunities for profitable conversion operations. The currency fluctuations of our ancestors were not so severe as ours (p. 107). The principle of the old Sinking Fund was to some extent present in the arrangements of 1829 and not a new idea in 1866 (p. 82). Bank notes were not made legal tender in 1797 (p. 97), but in 1812. Ricardo did not open the depreciation controversy in 1807 (p. 98), but in 1809 (the depreciation which attracted general attention occurred between those two dates). Mr. Lloyd George mistakes by one and a half years the length of time which has elapsed since the Armistice.

R. F. HARROD

L'Évolution de la Pensée Politique en France au XVIII^e siècle. By HENRI SÉE. (Paris: Giard. 1925. Pp. 398.)

HERE is a systematic series of brief chapters on each of the thinkers and schools of thought of the eighteenth century in France, making up a very convenient handbook. The Physiocrats are dealt with in their capacity as political philosophers, not economists; and it is pointed out that while Quesnay was in favour of enlightened despotism, the second generation of his disciples "adhered to liberal ideas." To the question whether socialist doctrines can be traced back to the eighteenth century, M. Sée justly replies that, though the general idea of the iniquity of property occurs often enough, "the socialism of the eighteenth century" differs profoundly from that of nineteenth-century theorists. "Landed property was then of preponderating importance; the social question was that of the peasants and not of industrial workers; capitalist industry was only just beginning; and nobody yet dreamt of a conflict between labour and capital." But he renews the suggestion made in an earlier work, that Turgot, though himself the firmest of believers in the merits of property and freedom of competition, nevertheless contributed largely to the later development of socialist ideas—class warfare, class consciousness and the like—by the sharp distinction he drew between "les entrepreneurs" and "les ouvriers."

W. ASHLEY

La regolazione delle Entrate e delle Spese (nella Repubblica di Venezia nei secoli XIII e XIV). ROBERTO CESSI. (Padova: A. Draghi. 1925. Pp. 276. Lire 35.)

ITALY, the country which for so many centuries was foremost in commerce, banking and finance, has, stored in her archives, many documents of fundamental historical importance which deserve to be made known. In the past numerous foreigners have devoted themselves to Italian history and have laboured among these records. As is generally known, the history of the Bank of San Giorgio at Genoa was written by a German named Sieveking who investigated the official documents. To-day, however, these things are changed. Italians no longer submit to the leadership of foreign science, but are enthusiastically taking up the work of reconstructing the economic and financial history of the former monarchical states and republics of the peninsula.

Einaudi and Prato have taken Piedmont as their field, and each has produced two volumes. Einaudi's two deal respectively with the Public Revenues of the State of Savoy during the War of the Spanish Succession, as shown in the Budgets and Treasurers' Accounts,[1] and the Finances of Savoy at the beginning of the eighteenth century and during the War of the Spanish Succession,[2] while Prato's subjects are The Economic Life of Piedmont in the Middle of the Eighteenth Century,[3] and Problems of Currency and Banking in the Seventeenth and Eighteenth Centuries.[4]

The economic and financial history of the Venetian Republic is, however, far more important and interesting than that of Piedmont; and the task of relating it in detail is now being undertaken by a group of earnest and capable investigators whose work has already produced some extremely important results.

The Royal Commission for the Publication of the Financial Documents of the Venetian Republic,[5] founded in 1897 through the initiative of Luigi Luzzatti, was also entrusted with the work of examining the financial and economic papers preserved in the Archives of the Frari at Venice. Between 1903 and 1912 three large volumes were issued under the direction of Professor Besta as a result of his own work and that of his colleagues. They contained the Budgets of the Republic from 976 to 1755[6] arranged in order and amply illustrated, with prefatory comment by Luigi Luzzatti and an Introduction by Professor Besta.

These researches and their publication, which were interrupted by the war, are now being vigorously resumed. Two volumes are announced to appear in the near future, one on the Loans of the Venetian Republic,[7] by Gino Luzzatti, the other on the Definitive Budgets from 1641 to 1736,[8] by Pietro Rigobon, while the series has already been enriched by the very interesting collection of thirteenth- and fourteenth-century papers relating to the regulation of revenue and expenditure, by R. Cessi and P. Bosmin, which is the subject of this notice.

The book opens with a preface by L. Luzzatti and is of great

[1] *Le entrate pubbliche dello Stato sabaudo nei bilanci e nei conti dei tesorieri durante la guerra di successione spagnuola.*

[2] *La Finanza sabauda all' aprirsi del secolo XVIII e durante la guerra di successione spagnuola.*

[3] *La vita economica in Piemonte a mezzo il secolo XVIII.*

[4] *Problemi monetari e bancari nei secoli XVII e XVIII.*

[5] *R. Commissione per la pubblicazione dei documenti finanziari della Repubblica Veneta.*

[6] *Bilanci della Repubblica Veneta dal* 976 *al* 1755.

[7] *Prestiti della Repubblica di Venezia.*

[8] *Bilanci di avviso dal* 1641 *al* 1736.

importance, for, in addition to the documents reproduced, which throw a strong light on the measures taken by the Republic in a time of great financial stress to curtail expenditure and increase the revenue, a learned and weighty introduction has been contributed by Professor Cessi, whose wide and profound knowledge of Venetian institutions has enabled him, in spite of immense difficulties, to reconstruct the history of Venetian financial policy from the middle of the thirteenth century to the Chioggia war (1379). After giving a general picture of the financial condition of the Republic, which was far from satisfactory, owing to the subdivision of the financial administration among various separate bodies, the ceaseless expenditure on war, and the systematic waste of public money, Professor Cessi shows in detail what was done by way of attempting to remedy this deplorable state of things. The Great Council, reduced to impotence by internal dissensions, was gradually despoiled of its supreme powers, including its financial sovereignty, and these powers were transferred to special Councils, sometimes created *ad hoc*, composed of a few upright and disinterested men. On their initiative various important regulations were made or attempted. In 1282, in order to set a limit to the increase of expenditure, the consolidation of all ordinary expenditure was effected. In 1349, not to mention many intervening regulations of minor importance, an endeavour was made to treat revenue and expenditure as one whole, and, in order to achieve this, it was proposed to set up a central authority which should have power, not only nominally, but in fact, to unify the existing fragmentary and disorganised financial activities. But these efforts, though inspired by the highest patriotism, often failed to bring about the expected results, sometimes because the wars which the Republic so frequently had to wage rendered vain all plans for economy and orderly methods, sometimes owing to the paralysing effects of internal political strife and the prevalence of private over public interests.

Thus the financial problem remained for the most part unsolved, and the deficits continued to be both chronic and systematic. They were balanced by loans, generally forced, which were subsequently amortised. But no sooner was one debt extinguished than others were contracted, while their amortisation was a continual cause of trouble to the Republic. Later, the financial problem became involved with that of commercial policy. The customs dues were an important source of Venetian revenue, but their increase, however advantageous financially, was an economic danger to a State which existed chiefly by means of its foreign

trade. Hence the alternations between a free-trade and a protectionist policy, which were due to the opposing pulls of economic and financial necessities and to pressure exercised by particular groups whose interest it was to exclude foreigners and, ultimately, even competitors of their own nationality, in order to secure a monopoly for themselves. This internal rivalry of interests and policies continued throughout the greater part of the fourteenth century to paralyse the financial life of Venice, and to nullify the most strenuous efforts of those who were endeavouring to restore it to health, while it finally prevented preparations being made in sufficient time for the defence of the Republic against Genoa, Venice's commercial rival, who, jealous of her Eastern trade, had been threatening her for some time past. This state of affairs lasted, in fact, until 1379, when the Genoese galleys arrived at Chioggia and blockaded Venice. Then the Republic, making a supreme effort in her own defence, put pressure on her own rulers. An account of the financial, commercial and political vicissitudes of the period immediately preceding the Chioggia war closes this erudite and interesting volume, which illuminates some important pages in the financial history of the Venetian Republic.

MARCO FANNO

NOTES AND MEMORANDA

Trade of Large and Small Countries

1. The proposition that small countries tend to have a large trade per head is stated in somewhat different forms by Marshall and Grunzel.[1] This note is an attempt to sift the evidence, observing the qualification of the former, that comparisons should be made between nations of similar conditions and vigour. The proposition is of practical importance in relation to certain international comparisons, whereby it has recently been sought to show the advantage of free trade by reference to value of exports. For if mere size lessens trade per head, such conclusions must obviously be qualified.

2. The countries taken should be arranged with due regard to their productive areas.[2] Where there are large blocks of unproductive territory, as in the north of Canada and the centre of Australia, these must be allowed for, since they might just as well be foreign. Though large in quoted area, these two countries are economically much smaller than the Argentine or the United States; in 1912–13, the time taken for the following comparison, they were economically smaller than even France or Germany. The productive land area of Norway is only the rim of her territory, about a third of the whole. The grouping of countries according to general economic conditions lessens, but does not abolish, the importance of this correction for the European countries; it is quite necessary in the case of new countries.

3. Marshall refers generally to trade; Grunzel tests by exports. The total trade counts the balance of services one way, and leaves them out the other way. It is the least satisfactory index. If services are to be included, the larger figure either way should be taken. But an answer to the question how size of area is related to trade could not properly include services rendered on the high seas or by capital invested abroad. To what area are these to be attributed? In this respect a difficulty appears in any figure of the trade of fishing countries like Norway and Iceland; we need not make the difficulty a general one. Grunzel

[1] *Industry and Trade*, chap. ii.: "Economic Protectionism," pp. 38, 72.

[2] These are taken from the *International Year-book of Agriculture*.

is probably right in taking exports, which are in nearly all cases the smaller figure for Europe. But, again, proper grouping eliminates this question so far as concerns the order in which countries will stand; and it is only an order, not a correlation, that can be expected in any case. In the following calculation the special exports of merchandise are taken. The inclusion of bullion would not affect the result.

4. A general table for all the countries whose special trade can be quoted would be quite chaotic. The grouping that is necessary is into the industrial and non-industrial countries of Europe, and the less settled countries of the New World. Not only is similarity of conditions required, but there is also the disturbance to a general comparison due to the fact, indicated by Marshall, that the industrial nations are credited to a greater extent than the others with the value of imported materials. For the third group, those new countries must be taken which have sufficient similarity in their populations, and this excludes South Africa.

5. On what grounds is any relation to be expected? Marshall's first reason is economic, that small nations are likely to have less varied resources. He illustrates this by reference to such limiting cases as a fishing village and an arid mining area. When we leave such cases, however, and consider national units, it does not appear that variety of resources is wanting in such small countries as Belgium, Switzerland and Holland; specialism is rather a feature of large countries of the non-industrial type. Of the small European countries, only Denmark can be called a specialist. Grunzel's account of this tendency is unsatisfactory; a small State, he says, does not afford a sufficient home market for its own produce. But a small population will both make and consume less; a dense one will both make and consume more. The more fundamental reasons are those which, as is to be expected by the nature of the problem, are fundamentally mathematical. Marshall states two propositions. Small countries have a large frontier in relation to their area; and the average distance of their productive centres from the near foreign market is less. These are the causes that have to work out, if at all, through a great variety of accidental influences. There might be added the idea that, since the world as a whole has no foreign trade, small nations have a larger world to trade with than large ones; but this consideration, almost derisory in any case, does not fit facts of distribution of population.

6. The following tabulation is based on the returns for 1912

and 1913. Some comments are necessary. The order preferred is that of productive areas, but where countries nearly alike in that respect differ considerably in total area, the larger total is placed lower. For example, the productive areas of Canada and Australia were 445 and 485 kilometres respectively; their total areas were 9,337 and 7,706; Canada is placed lower. But both are reckoned as smaller than the Argentine, whose total area was 2,987 and its productive area 2,177. Norway is placed so as to allow for her fishing area. It is specially important to note the trade figures of Holland and Belgium. The foreign Statistical Abstract gives a warning, not observed in the new Bulletin of Statistics, that their special trade before the war was still inflated by unseparated items of through trade; while Dutch trade values were then quite fictitious. Allowing for prices, the post-war returns show that Dutch pre-war figures may properly be at least halved. This is important, because the whole theory of the trade of small nations may well have originated in the apparent magnitude of the trade of these two countries. Countries are omitted which would have to be compared with each other only by twos and threes, because of facts of race and quality; such as China, Japan and Siam. The most tempting application of the whole theory would be to the small island and other communities of the Atlantic and Pacific. Analysis of their general trade and conditions shows that the influence of military stations, of standards of life, and of collecting trade make it unsafe to institute a comparison even between any large number of these by themselves. Some of them afford an interesting study in the theory of "invisible" trade.

SPECIAL EXPORTS £ PER HEAD AND PRODUCTIVE AREAS, 1912–13

Industrial Europe.		Non-industrial Europe.		New Countries.		1000 sq.km.
Belgium	(20)	Denmark	12·5			Up to 100
Holland.	(20)	Greece	2·0			
Switzerland	14	Portugal	1·3			
		Bulgaria	1·2			
		Rumania	3·5			
Italy	2·8	Norway	8·0	New Zealand	19	200–300
U.K.	11	Sweden	8·0			
France	6·7	Spain	2·3	Australia	16	440–600
Germany	7·0	Austria-H.	2·3	Canada	12	
				Argentine	13	2000–3500
				U.S.A.	5	
		Russia	1·0			5700

7. Only if Greece, Portugal, Rumania and Bulgaria can be regarded as backward as to either vigour or availability of capital —and this is a possible interpretation—can regularity in this tabulation be obtained. It should be added that at this time the Customs duties of Greece and Portugal had a comparatively high average incidence on their imports; the rates being 26 and 22 per cent. as against about 5 in the U.K. and from 7 to 8 in France and Germany.

8. Marshall's further proposition that federation lessens the foreign trade of the federating parties as a group, is an independent one. But if it were a question of annexation or cession of contiguous territory, there would be the difference that the per head trade of the groups would be quoted before and after the proceeding. It is conceivable, but not likely, that the country regarded as annexing might increase its per head trade by the process.

9. Whether too much has to be done for the general theory in applying it to facts I do not decide. The conditions are such as to require some degree of selection and arrangement.

D. H. MACGREGOR

NOTES ON AUSTRALIAN EXCHANGE

CONCURRENTLY with Britain's restoration of the gold standard, Australia announced a return to parity of exchange and a resumption of free exports of gold. The English and Australian pounds were no longer of different values and the period of exchange difficulty was ended. There are certain peculiarities in the new exchange rates which require elucidation, and the change in monetary policy offers an opportunity of reviewing the experience of recent years.

1. *Purchasing Power Parity and Australian Exchange.*—During the war and post-war period Australian exchange was remarkably stable despite fluctuations in the balance of international payments and variations in English and Australian price levels. The Commonwealth Statistician estimates that the net balance of payments was in favour of Australia over the period 1914 to 1924, but there were wide annual variations. Thus in 1915 and 1916 the adverse balance was £30,000,000, and was followed by a favourable balance of £40,000,000 during the next two years. The balance was greater in subsequent years, reaching a maximum adverse balance of £37,000,000 in 1921 and a maximum favourable balance of £47,500,000 in the following year. A graph of

English and Australian prices shows that British prices rose much higher than Australian prices to 1920, the respective levels in April being 220 per cent. and 140 per cent. above the 1913 level. British prices commenced to fall in April and Australian prices in July. They reached a common level early in 1922, but showed opposing movements from then till the end of 1924. Thus Australian prices rose from April 1922 to June 1923 while British prices fell. Despite these fluctuations in prices and the balance of payments, exchange rates were remarkably stable. During 1921 there was an adverse exchange, and sight drafts were quoted at 37*s*. 6*d*. premium. In 1924 exchange was favourable to Australia and sight drafts were at a discount of 55*s*. But generally the variations were much less serious than the conditions warranted, and the history of the Australian exchange with London during the period of paper currencies does not confirm the purchasing power parity theory. This may be explained as follows :—

(i) The traditional view of the identity of the British and Australian pounds helped to prevent any divergence of price levels being reflected in the exchanges. Even with substantially differing price levels parity of exchange would not appear incongruous, whereas such would be the case with other countries.

(ii) Bankers preferred to maintain parity and adopted the practice of discouraging remittance rather than varying their rates. This was partly due to the importers putting the case against a varying exchange very forcibly to the banks—it would disorganise business. Banks apparently accepted this view, and would permit a considerable accumulation of funds. A continued stringency might affect them, but could hardly have been serious at this end because of the plentiful cash supplies through the note issue. At the other end it was an important factor during the heavy importing in 1920–1, but banks went so far as to sell securities rather than have a very adverse exchange rate. This, along with discouragement to clients in the matter of drafts on London, was sufficient, and exchanges were thus kept close to par.

(iii) It was generally easy to get funds in London to finance imports, because (*a*) some banks had their headquarters in London and thus had heavy investments there, (*b*) Governments were frequently raising loans in London, and (*c*) the Commonwealth Government had apparently

a floating debt with the British Government on account of war payments. These resources would have a stabilising influence.

(iv) Exports were easily financed, partly because of the plentiful cash supplies at home, the general inflationary banking finance for war and post-war loans, and the arrangements made with the British Government for purchasing food-stuffs and raw materials. Hence the exigencies of Government policy prevented a free adjustment of exchange rates to price levels.

(v) During the period when the Australian pound was at a high premium and it was difficult to finance exports, the practice of selling foreign holdings of Australian securities to Australia was adopted. This acted in the same manner as a loan floated in Australia for the benefit of foreign purchasers of Australian goods.

(vi) Finally, there was the acceptance by the banks of British exchange rates with other countries. This must be regarded as an important illustration of the determination of the banks to maintain parity, which was probably the determining factor. Banks did not deliberately arrive at this policy; rather they accepted the pre-war tradition and fought against any variation. At the time they had a monopoly of exchange transactions (the outside broker was much less important than in more recent times, and the Commonwealth Bank had not yet used its influence in exchange transactions), and their policy was effective.

(vii) It is important to note that the system was fundamentally a sterling exchange standard worked on the basis of the gold-exchange standard. The availability of funds in London and the cash resources in Australia were the essential features. The system failed only when one of these conditions was not fulfilled. In 1924 cash at home was not sufficient, nor were conditions buoyant, hence the variation of exchange in conformity with the p.p.p. theory.

2. *The New Exchange Rates.*—On May 6 exchange rates were lowered, and a further reduction was made on June 11, when telegraphic transfers were quoted at par for selling, and 5*s*. per cent. discount for buying. The reduction to par was accompanied by a change in the difference between buying and selling rates and certain features of the change require comment :—

(i) In May 1915 the difference between buying and selling was 17*s*. 6*d*. per cent., at present it is 12*s*. 6*d*. except for T.T., where it is only 5*s*. Before the change it was 20*s*. for T.T., and increased to 35*s*. for 90-day bills.

(ii) A general consideration of great importance was, no doubt, the pressure from the Government upon the banks to reduce their exchange charges. The Imperial Economic Conference in 1923 discussed this fully and recorded a decision that the rates were too high, and should be reduced. The Government has since then urged banks to reduce their charges, and its protest has been rendered more effective through the new powers of the Commonwealth Bank.

(iii) The small difference for T.T. was due in part to the operations of the exchange broker, who was most effective in T.T. business but cannot make a profit upon a 5*s*. difference. The 12*s*. 6*d*. difference between buying and selling for other rates is apparently the new normal. The rates themselves are based upon 6 per cent. interest and follow naturally after the determination of O.D.

(iv) A contributing factor to the T.T. rates was the desire of the Commonwealth Bank to restrict imports of gold. It cannot be profitable now to import gold, and this strengthens the position of the Commonwealth Bank. Apparently the banks were promised supplies of notes if they brought the T.T. buying rate down, and on May 14 there was a significant cable upon the new arrangements between the Bank of England and the Commonwealth Bank for a gold exchange standard. It was announced that notes would be issued in Australia against deposits of gold at the Bank of England, but there is no suggestion yet of extending the arrangement to periods of adverse exchange, when notes would be received and cancelled in exchange for gold in London.

(v) Selling rate for T.T. is kept high partly to deal with the outside broker and partly also to induce a demand upon the still accumulated funds in London. Banks are apparently still anxious to procure funds here and to have their funds in London reduced—a discount upon drafts on London is therefore given.

(vi) For political reasons the Commonwealth Government desired a heavy fall in the T.T. buying rate. First there was the clamour of the rural and exporting interests, and secondly the problem of the conversion loan in the spring. The influence of the first is obvious, but the second is not so clear. The Government wanted a cheap loan; they also wanted a successful conversion. It is apparently thought that an easier banking situation will give it; hence the whole of the present policy—normal exchange, elastic note issue against London balances, credit expansion, rising stocks and bonds, and thus a fall in rates. The Commonwealth Bank has been very useful as an instrument in bringing this about, and could even threaten to act independently in the exchange business. The banks have quite readily agreed for reasons already explained. The policy was successful and has materially assisted in easing the money market to make possible the big conversion operation at 5½ per cent.

D. B. Copland

University of Melbourne,
September 1925.

Official Papers

Labour and Land in East Africa. East Africa. Report of the East Africa Commission. [Cmd. 2387.] 1925. 3*s.* 6*d.*

Mr. Ormesby-Gore, Major Church, and Mr. Linfield, the three M.P.'s who formed this Commission, were appointed to visit Northern Rhodesia, Nyasaland, Tanganyika, Uganda, and Kenya and to report on any facts bearing on the terms of reference to the East Africa Committee. The terms of reference to that Committee covered generally the economic development of East Africa and the social and economic conditions and taxation of the native population. The Commission had about three months in which to study this immense extent of territory and the even more immense extent of subject. Whether three gentlemen, without previous experience of African conditions, can, in a three-months tour, acquire much information of value seems *a priori* rather doubtful.

The doubt is not removed by their Report. It covers so many different subjects and Dependencies that a detailed review of it is here not possible, and it seems advisable, therefore, to

concentrate attention, so far as this notice is concerned, upon a single problem dealt with by the Commission. That problem is in my opinion much the most important which the Commission had to face, namely, the economic relations of the white and black population in Kenya Colony. The economic position in Kenya is notoriously bad, and the reason for this is not obscure. A very large extent of the best land in that Colony has been alienated to Europeans who are attempting to exploit it in farms or estates. These Europeans have to rely on native labour. But the African in Kenya refuses to work for wages on the European farms unless forced to do so either directly or indirectly. To a certain extent he is forced by being deprived of his land or by heavy taxation or by administrative "pressure." But even so there is a continual lamentation from the Kenya settlers about the shortage of labour. On the other hand, you have a native population either relegated to Reserves, uneducated, heavily taxed, with no legal rights in the land, harried and discontented, or forced to work for low wages against their will for white masters.

This is the position which the Commission had to consider. The Report never squarely faces the facts. The most important fact is that there are two alternative and conflicting policies with regard to land and labour in Africa. One is that which is being pursued with disastrous results in Kenya. The other has been adopted in British Dependencies on the West Coast. It consists in refusing to make the Administration the labour recruiter for European settlers and Companies, and in encouraging the natives to make the most economic use of their own land. Native production of food and of economic products for export has been signally successful wherever on the West Coast this policy has been adopted. The question which the Commission ought to have answered, but which it does not attempt to answer, is why this policy cannot be pursued with equal success in Kenya. There is only one thing which would make it physically impossible, namely, if the East African is so inferior to the West African in ability that he is incapable of growing for himself grain or economic products like cotton. There is not the slightest evidence that this is the case, indeed such facts as native cotton growing in Uganda are all the other way.

Why then, if the Commission is considering the "general economic development" of Kenya, does it not recommend that every encouragement should be given, as in West Africa, to native agriculture, not on European estates, but on the natives' land? Surely that would seem to be the minimum involved in the pro-

fession, quoted by the Commission from the White Paper of 1923, that "in the Kenya Colony the principle of Trusteeship for the Natives no less than in the Mandated Territory of Tanganyika is unassailable," and still more in the declaration in the same despatch which the Commission strangely neglects to quote:

> "Primarily, Kenya is an African territory, and His Majesty's Government think it necessary definitely to record their considered opinion that the interests of the African natives must be paramount, and that if, and when, those interests and the interests of the immigrant races conflict, the former should prevail."

The explanation is perhaps that in this case the interests of the immigrants and of the natives do conflict. If the Kenya Government did what the Nigerian Government do, encouraged native agriculture and refused to attempt to force natives to work for Europeans, the shortage of labour for European estates would be much greater than it is.

The Commission, except in a short "Supplementary Memorandum," which is in effect a Minority Report, by Mr. Linfield, adopts the views of the European settlers. This is the kind of thing they say:

> "It is inconsistent with the economic progress of the whole country and with advance in the civilisation of the native of Africa that he should be allowed to stagnate in a native reserve, leaving all the work to the women, the men doing nothing. He must be taught by every legitimate means open to the Government that as he is no longer required for fighting it is his duty to the community and to himself to work, and that unless he is prepared to do a reasonable amount of work on his own account it is his duty to go out to work either for Government or private employers in industrial employment."

Note the unwarranted assumption that the native stagnates on his own land and that only the women work—commonplaces of East African propaganda. How does it come about that next door in Uganda the native does nothing of the kind and still less in West Africa? And why do the Commissioners hold that we have the right, nay, duty, to compel the native of Africa to work for wages? They would be horrified at the idea that the Russian Government has a right to compel Russians in the same way, and still more by anyone who attempted to argue that it

is inconsistent with economic progress that anyone should be allowed to stagnate in such native reserves as Grosvenor Square, and that the inhabitants must be taught that it is their duty to the community and to themselves to work, and that unless they are prepared to do a reasonable amount of work on their own account it is their duty to go out to work either for Government or private employers in industrial employment.

LEONARD WOOLF

Report of the Committee on Stabilisation of Agricultural Prices. Ministry of Agriculture: Economic Series, No. 2. (Price 1*s.* 6*d.*)

THE members of this Committee—Mr. Ashby, Mr. Enfield, and Mr. Lloyd—have in this Report offered a broad sketch of the principles which underlie the problem of stabilisation as it affects agriculture. Without taking evidence, they have made their own analysis, and suggested the lines on which further examination should proceed.

The causes of fluctuation of agricultural prices are distinguished as due to either general monetary causes, or variation in the volume of production in relation to the conditions of marketing. The authors believe that " variations in the purchasing power of money have been responsible for greater misfortune to agriculture than has arisen from any other single cause." But this influence has tended to be ignored in favour of the simpler explanation of foreign competition, and the easier remedy of Protection. Agriculture is specially affected, as they observe, and, as has recently been shown by Dr. Whetham, by an unusual lag between the incurring of costs and the returns, amounting in the case of arable farming to a weighted average period of fourteen months. Hence the fact that a change of prices is general does not clear the farmer if it is downward. Again, agriculture is not a case of continuous production which can be restricted at will to meet market conditions; having incurred its costs, it awaits the return which the season gives. To the labourer in particular, rising prices are offset by a fall in real wages. As agricultural experts of authority, the members of the Committee add their support to any scheme of price stability which the banks can work.

The second part of their Report deals more specially with agricultural policy. They have a good deal to add, that is freshly put, to the growing literature of co-operation as a measure of stability. On the example of the best foreign experience, they

stress the importance of a commodity basis, of federation, and of definite contracts of disposal between such organisations and their members. But the most interesting part of the whole Report is that in which they handle the large problem of home, colonial and foreign supplies in relation to a possible participation by the State in the work of distribution. They would prefer its function to be that of sole shareholder rather than of active manager. They are here dealing with plans which had been mentioned before the war, but have been more closely canvassed in several countries since. So many problems are raised that the Committee, while obviously sympathetic to the scheme, prefers that further research into it should be undertaken by the League of Nations or the Institute of Agriculture. As any plan likely to be adopted in this country would almost certainly imply preferential purchase of home and colonial supplies, the critical matter might be the reaction of this on the availability of foreign supplies when wanted. If we are to buy abroad only such surplus as we cannot obtain from current Imperial or stored supplies, and this is known to be our policy, will the foreign producer be found to have produced this surplus, on the chance of our wanting it? He cannot, as the authors see, be left out of the arrangement altogether. The Report is a valuable study of the question, and a skilful contribution to agricultural economics.

D. H. MACGREGOR

League of Nations: Report on the International Conferences on Opium and Dangerous Drugs, held at Geneva. Cmd. 2461.

International Labour Conference, Geneva, 7th Session: Report by the British Government Delegates to the Minister of Labour. Cmd. 2465.

Kenya. Compulsory Labour for Government Purposes. Cmd. 2464.

CORRESPONDENCE of the Secretary of State for the Colonies and the Governor or officer administering the government of Kenya; permitting compulsory labour under strictly defined limitations.

First Report of the Royal Commission on Local Government. Cmd. 2506.

On methods of dealing with proposals for the constitution or extension of County Boroughs and on the relevant law and procedure.

Report of the Ministry of Labour for the Years 1923 *and* 1924. Cmd. 2481.

Conciliation and Arbitration, Employment Exchanges, Unemployment Insurance, Administration of the Trade Board are among the topics.

Report by his Britannic Majesty's Government on the Administration under Mandate of Tanganyika Territory for the Year 1924. [Colonial, No. 11.]

Income Taxes in the British Dominions. A digest of the laws imposing income taxes and cognate taxes in the British Dominions, Colonies, Protectorates, etc. 1925. 1*s*. net.

Report on an Enquiry into the Wages and Hours of Labour in the Cotton Mill Industry. Labour Office, Bombay, 1925.

The number of work-people engaged in the Industry in (year ending) 1923, viz. over 250,000, the proportion of men to women (above 4 to 1), the daily and monthly earnings and other relevant particulars are set forth.

Report submitted to the Committee on Economic Restoration of the International Chamber of Commerce.

The Report is prefaced by an address in which Sir Josiah Stamp, demanding admission for "the often unwelcome or even the half-conclusive results of theoretical analysis in place of easy readings of superficial facts," argues that every restrictive, safe-guarding or protective measure is *anti-reparation and anti-debt payment* in its tendency. Let a reasoned and conscious choice be made between reparations and those opposite policies. The first part of the Report, signed by all three members of the reporting sub-committee, explains lucidly the principles of the Dawes Report. In the second part for which Sir Josiah alone is responsible, he grapples more closely with the problem; demon-

strating among other conclusions that the inelasticity of demand for German goods on foreign markets will be less where the markets are not those of private consumers for individual use, but of collective bodies for public purposes. "If the outflow from Germany merely takes its course in the old channels it will flood and overflow them. But judicious forethought will instead irrigate a wide area of the world with safety and profit."

The British Association Meeting at Southampton, August 26 to September 2, 1925

At the Southampton Meeting of the British Association the proceedings of Section F included, in addition to the ordinary programme and the usual joint discussion with the agricultural section, a two-days' joint discussion with Section G (Engineering) on transport problems. The meeting was noteworthy in that a lady economist, Miss Lynda Grier, was president of the Section. Her address on "The Meaning of Wages" is printed above. Mr. Hawtrey's paper on "The Gold Standard and the Balance of Payments" will appear in a later Journal.

At the joint Meeting with the agriculturists, Mr. R. B. Forrester opened a discussion on "The Marketing of Agricultural Products." He pointed out that the farmers of other countries have done a great deal to improve marketing methods by establishing grades and standards of quality. To some extent they have been aided by their Governments, though so far development has been especially associated with the efforts of the farmers themselves. In the future the British producer will probably be compelled to give attention to marketing methods. Among the other authors of papers may be mentioned Mr. P. B. Whale, who investigated the possibilities of "Reparations' Transfers under the Dawes Scheme"; Mr. Sargant Florence, who considered the relation of the statistician to the problem of over-population, and Mr. Fabian v. Koch, who described the methods of unemployment relief in Sweden. Mr. G. F. Shove detailed the many various interpretations that may be placed on the Law of Diminishing Returns, and referred to their bearing on the problem of population. Mr. R. F. Harrod, examining the problem of the trade cycle in relation to the theory of distribution, held that fluctuations in distribution, whether of monetary origin or not, may cause fluctuation in trade. In her paper on the "Economics of Family Endowment" Mrs. Stocks censured

the theoretical economists for having neglected the importance of the family in the formulation of their theories.

Concerning the joint meetings on Transport Problems, space only permits us to mention those papers which were contributed by the economists. Mr. Tetley Stephenson, in outlining the present position of British Railways, stressed the importance of obtaining economies in operating expenses, including reduction of the wages bill. He emphasised the effects of the new road competition, which he held to be subsidised from local taxation, to which the railways contributed.

"The Economics of the Modern Port" was the title of a paper contributed by Mr. Alfred Scholfield, who concluded that the future lay with the large port. Dealing with the question of port-ownership, he pointed out that the trust-owned port had little control over inland transit, especially as compared with the railway-owned port. A paper entitled "The Development of Road Transport and its Economic Significance," by Mr. K. G. Fenelon, sketched the growth of road transport and outlined its social and economic reactions. The great advantages of road transport, he said, were its flexibility, the possibility of providing door-to-door services and the small capital outlay required.

Current Topics

The following have been elected to membership of the Royal Economic Society:—

Abhayambal, Prof. Sri U.
Allum, F. E.
Anderson, R. A.
Anninos, C.
Ashworth, H. F.
Backhouse, H.
Bell, A. B.
Bernard, Mrs. Frances F.
Blake, S. B.
Brown, L. F.
Callin, R. E.
Charlesworth, C. W.
Cuthbert, N.
Davies, John.
Davies, J. S.
Dickinson, H. D.
Dodds, L. V.
Dodsworth, James E.
Edeson, A.
Ellis, C. A.
Ellis, F. E.
Erskine, J. W. W.
Evans, C. P.
Evans, T. W. C.
Franklin, E. C.
Ganly, L.
Gibb, R.
Gitsham, S.
Government Statistician, Perth, Western Australia.
Haddon, Norman J.
Harris, F. W.
Hayward, A.
Heddon, S. R.
Hill, H. E.
Hodgson, R. A.
Hughes, F. R.
Hunt, W. J.
Karadja, C. T.
Kohanowsky, N. J.
Kriplani, C. R. Choith R.

Lamb, C. G.
Lanyon, H. T.
Loevenstein, K.
McCabe, G.
Mani, S.
Mazzei, Prof. J.
Middleton, F. N.
Mongia, Jol. Singh.
Munro, H. N.
Narayanaswamy, B. V.
Oliphant, W. J.
Parker, L.
Pease, P. T.
Plant, Prof. T.
Purkayastha, K. C.
Rahim, Mohamed Kamil A.
Rao, Prof. N. S. Subba.
Rebello, A. R.
Redford, Arthur.
Reeve, H. F.
Roberts, H. D.
Robertson, W. H.
Salt, W. E.
Scott, H. R.
Smith, D. M.
The Actuary, Commonwealth Bank of Australia, Sydney.
Thomas, R. C.
Thomson, V. A.
White, H.
Williams, Thomas.
Wright, R. C.

The following have compounded for life membership :—

Bernard, Mrs. Francis F.
Bhargava, Prof. S. P.
Dobbs, A. C.
Dodsworth, James E.
Dudley-Kindon, K.
Haddon, Norman J.
Kriplani, C. R. Choith R.
Mongia, Jot Singh.
Rahim, Mohamed Kamil A.
Rebello, A. R.
Redford, Arthur.

The following have been admitted to library membership :— The Treasury, Government of the Province of British Columbia; Massey-Harris Co., Ltd., Toronto.

We record with regret the deaths of the following Fellows of the Society :—

Carter, R. A.	(elected 1920).
Goulden, B. C.	(„ 1894).
Leppington, C. H. de E.	(„ 1909).
Macdonald, J. M.	(„ 1890).
Mason, S.	(„ 1895).
Mills, A. S.	(„ 1924).
Morrow, T. J.	(„ 1920).
Schuster, Dr. E. J.	(„ 1909).
Walker, Sir Edmund	(„ 1891).

The retirement of Professor J. S. Nicholson from the Chair of Political Economy in the University of Edinburgh, which became an accomplished fact at the end of last September, deprives the University of services which it has enjoyed since 1880. During that long period the University has benefited not only by the Professor's teaching and the honour reflected from

his writings, but also by the impulse which he has given to the organisation of economic studies. During his tenure of office, and largely at his suggestion, there has been added to the Department of Economics a lectureship in economic history and three subordinate lectureships in political economy. There is also a readership in political science, connecting the economics school with that of history, and a readership in geography, which connects it with studies in physical science. There has also been established a new Department of Commerce, which has professorships of accounting and business method and of the organisation of industry and commerce, and a readership in mercantile law. The subject of political economy, which at first was represented in no degree curriculum, now has an important place in the curricula for degrees of M.A., B.Com., LL.B., and B.Sc. in agriculture. The number of students has increased tenfold in Professor Nicholson's time. The loss sustained by the University through the retirement of Professor Nicholson is compensated by the gain which will result to the economic world from his being freer to add to the long series of his important contributions to economic literature.

WE regret to have to record the death of Dr. James Mavor, Emeritus Professor of Political Economy in the University of Toronto. He was an original member of the British Economic Association, and contributed to the first number of the JOURNAL an important article on the Scottish Railway strike which began December, 1890. In each decade of the JOURNAL'S existence it has been enriched by his contributions. A fuller notice of his life and work than it has been possible to prepare in time for the present number of the JOURNAL may be expected next March.

VERY satisfactory progress has been made in the organisation of the Economic Society, proposed at the Adelaide meeting of the Australasian Association for the Advancement of Science in August, last year, and noted in the JOURNAL in December, 1924. Nine branches have been established and a conference of branch representatives was held in Melbourne on August 27, when the Society was formally launched. The constitution agreed upon provides for a central council to co-ordinate the work of the branches and to issue the publications of the Society. The objects of the Society are stated as follows :—

(*a*) To encourage the study of economics, and of its application to the conditions of Australia and New Zealand.

(b) To establish co-operative action for the investigation of local and general economic problems.
(c) To prepare digests of information upon current developments.
(d) To publish a Journal and such other matter concerning the work of the Society, and of its Branches and Members, as may be practicable.

It was decided to issue a Journal in November. It is hoped that the Journal will appear regularly twice in each year for the future, but arrangements for this will depend upon the degree of support forthcoming. The Journal will contain articles of special interest to Australia and New Zealand, notes on topics of economic interest, digests of legislation, book reviews and news of the activities of the branches. An editorial board was appointed as follows:—Professor R. C. Mills (Sydney), Professor D. B. Copland and Mr. E. C. Dyason (Melbourne), Professor J. B. Condliffe (Christchurch) and Mr. Malcolm Fraser (Wellington). The publication will be especially welcome to research students in Australia and should prove of some interest to economists in other parts of the world.

Professor Copland was elected President of the Society, Mr. G. L. Wood, Secretary, and Mr. R. B. Lemmon, Treasurer.

The Faculty of Commerce in the University of Birmingham has received a generous grant to enable it to undertake an industrial survey of the Midland area since 1860. It is proposed that the inquiry should include an examination of the chief industries with a view to discovering their inter-relations and the main factors, technical and economic, which have influenced their fortunes. Particular attention is to be paid to the scale of operation, the problems of transport, and the nature of the labour supply. An appeal has been publicly issued inviting private individuals and business firms to co-operate by placing information they may possess at the disposal of the Faculty. To further the work Mr. C. G. Allen, M.Com., has been appointed full-time research fellow in Industrial History, and Mr. J. F. Rees, the recently-appointed Professor of Commerce, is to devote part of his time to the inquiry. It is anticipated that the survey will occupy three years.

Mr. Herbert Heaton, lately Professor in the University of Adelaide, has been appointed to the Chair of Economics and Political Science at Queen's University, Kingston, Ontario.

Dr. T. E. Gregory, D.Sc., has been appointed to the Sir Ernest Cassel Chair of Banking and Currency tenable at the London School of Economics.

Mr. Walter Layton, and M. Rist, well known by his writings and as the colleague of Professor Gide in the editing of the *Revue d'Économie Française*, were appointed to inquire into the financial situation of Austria on behalf of the League of Nations and have presented a Report.

Professor Gide has been commissioned to inaugurate the University of Jerusalem.

The extra number of the Economic Journal devoted to articles on Economic History, the issue of which has been already announced, will be published in January next. This number will be sent to Fellows and to Library Members of the Society without extra charge. To outside subscribers the price will be the same as for ordinary issues of the Journal, namely 6*s*. *net*. **Such subscribers, wishing to receive the extra number, should place their orders at once with their booksellers or with Messrs. Macmillan.**

Errata

On p. 512, paragraph 6, for "helping the employees" read "helping the employers"; and for "*second*" read "*first*."

RECENT PERIODICALS AND NEW BOOKS

Journal of the Royal Statistical Society.

JULY, 1925. *The Week or Month as an Intermediate Unit for Statistical Purposes.* SIR NAPIER SHAW, F.R.S. The disadvantages of unequal months, the incommensurability of weeks and months, call for a new unit. Among suggestions made in the course of the discussion was the restoration of the last day in August to the position at the end of February which it is said to have occupied before it was transferred by Augustus in honour of the month named after him. *Taxable Capacity and the Burden of Taxation and Public Debt.* G. FINDLAY SHIRRAS. A digest of recent statistics: useful in itself and as having evoked a discussion on the relation between saving and surplus above necessary consumption, on the difficulty of defining minimum subsistence and on other questions. *The Element of Probability in Index-Numbers.* F. Y. EDGEWORTH. The view of Professors Irving Fisher, Allyn Young, and others that the theory of probabilities has no part in the construction of index-numbers is disputed. *The Generalised Law of Error.* E. C. RHODES. A brilliant suggestion for the improvement of a method employed by Bowley and others for the representation of unsymmetrical frequency-groups.

Banker's Magazine.

SEPTEMBER, 1925. *The Gold Standard.* Replies to Mr. Keynes by LORD BRADBURY and MR. WALTER LEAF. *Britain's Industrial Crisis*, unsigned, deals with the same subject.

The Quarterly Review.

OCTOBER, 1925. *The Gold Standard.* WYNNARD HOOPER. A strenuous defence of the Resumption. *The Father of Political Economy.* ARTHUR SHADWELL. A Study on Montchrétien, whose "Traite de l'Œconomie Politique," published in 1615, is in parts wonderfully modern. He objected to the importation of silk stockings, supposing that more than a million crowns left the country every year. "This enormous sum," he said, "will surprise no one who casts his eyes on the number of legs that wear them." *The Great Issue: Socialism versus Capitalism.* E. T. GOOD. The Editor explains that the article is written by one who has a lifelong personal experience of Trades-Unionism, and that a re-statement of simple bare facts rather than new information is offered.

The Edinburgh Review.

OCTOBER, 1925. *Our Changing Land System.* SIR HENRY REW. Change, slow in the past, has recently been speeded up. Witness the Agricultural Act, 1920, and its repeal in the following session—"the most extraordinary *volte-face* in political history"—and the reaffirmation of the principle of wage-regulations in agriculture

by the Agricultural Wages Act of 1924. Half a century ago there were no legal restrictions of the powers of the landlord over his tenants or of the farmer over his labourers. Now the freedom of bargaining in both cases, especially the former, is much restricted.

The Fortnightly Review.

SEPTEMBER, 1925. *Economic Progress in Ireland.* "MACDARA." The Irish are sending their capital abroad; English, Americans and Continentals are sending theirs into Ireland. For some years there will be peace; but how far the foreigner will absorb or be absorbed by the Irish is doubtful. There will be no Irish if Ireland's youth continue to leave at the rate of 40,000 a year. The agricultural exports are not so active.

The Round Table.

SEPTEMBER, 1925. With reference to Mr. J. M. Keynes' recent pamphlet and the views expressed by Sir Josiah Stamp as member of the Court of Inquiry into the Coal Industry, it is argued that the peculiar conditions of the coal industry accounts for much of the present unemployment and decline of exports. "Mr. Keynes himself would probably admit that the alternative [to the gold standard] of the managed currency has never been practical politics"; so rare is the ability required, so deterrent the recent experiences of inflation.

London and Cambridge Economic Service.

Special Memorandum No. 11. 1925. *The German Iron and Steel Industry.* DR. WALTER GREILING.

Irish Trade Journal (Dublin, Department of Industry and Commerce).

OCTOBER, 1925. Vol. I., No. 1. An editorial preface, after recounting all that the Free State Government has done for the promotion of industries, adds that Government may assist by spreading economic information of a practical kind, and that this is the object of the new journal. The first number gives full information about the scheme for obtaining power from the Shannon, and about the arrangement which has been made with a Belgian Company for the production of beet sugar in Ireland.

Indian Journal of Economics (Allahabad).

APRIL, 1925. This "Conference Number" consists of Papers read before the eighth Conference of the Indian Economic Association (1925). Taxation and Finance are the principal topics. Prof. C. J. Hamilton leads off with estimates of the growth of taxation in relation to population and prices in India.

International Labour Review (Geneva).

JUNE, 1925. *Trade Organisation and Labour Legislation.* J. A. VERRART. *The German and French National Economic Councils.* ROGER PICAR. *The Agrarian Problem in Spain.* FARNANDO DE LOS RIOS. Over a third of Spain some 84 per cent. of the landowners have such small holdings that they must be also wage-earners. The position of the latter class in Spain is miserable. Reforms securing the direct cultivation of the land by the owner are required.

SEPTEMBER. *The Legal Position of Public Servants in France.* A BOISSARD. *Unemployment in Hungary: its Causes and Cure.*

Quarterly Journal of Economics (Cambridge, Mass.).

AUGUST, 1925. *The Statistical Determination of Demand Curves.* HOLBROOK WORKING. A beautiful demand-curve represents the demand at different prices for potatoes in the United States for the purpose of consumption in a large sense of the term. Whether speculators' demand can and should be treated similarly, this and many other relevant questions are raised. *Chapters on Machinery and Labor.* II. *The Introduction of Automatic Bottle Machines.* GEORGE E. BARNETT. No trade union could have prevented the great displacement of skilled labour which took place after 1907. The policy of the Glass Bottle Blowers at least lessened the hardship of a transitional period. *The Static and the Dynamic View of Economics.* N. D. KONDRATIEFF. *Consumers' Demand.* JAMES W. ANGELL. The division of wants into two classes, regular (recurring and predetermined) and the opposite assists us to understand the phenomena of the market. The demand for the former class is generally inelastic. The latter, the optional class of outlays, becomes a larger part of the total expenditure as income rises. *The Changing Structure of the Bargaining Unit of Labor.* AMY HEWES. The day of the isolated single craft has gone; amalgamation everywhere prevails.

The American Economic Review (Cambridge, Mass.).

SEPTEMBER, 1925. *Fiduciary Powers of National Banks.* CHARLES S. TIPPETTS. *Price Margins during a Period of Prosperity.* W. N. LOUCKS. Referring to Prof. Wesley Mitchell's theory of business cycles. *Government and the Theory of Competition.* D. E. MONTGOMERY. How many competing units are required to secure the advantages of competition? When is selling below cost a fair method? These are among the questions approached. *A Primitive Clearing House.* W. C. MACLEOD. Among the Kwakiutl tribes in British Columbia the "potlatch," an exchange of presents for presents, led to the development of a primitive clearing house. *Income and Wealth.* WILLFORD I. KING. The concepts of utility and "psychic income" are defended. Preference is expressed for the "accrual" method, according to which an accountant credits a salaried worker with the salary earned during a specified period, even though payment is not made till later.

Supplement: Forecasting the Price of Hogs. By CHARLES F. SARLE. *E.g.* "When hog prices deviate more than twenty-five per cent. from their secular trend, corrected seasonally for two months or more at a time, there is a pronounced shoot in the opposite direction and to the opposite side of the prediction line in about eighteen months."

Journal of Political Economy (Chicago).

AUGUST, 1925. *The Utility Concept and its Critics.* JACOB VINER. The concept has contributed to knowledge; but its further elaboration is not required. But if the utility theorists have expended too much effort on the subtleties of utility analysis, the critics have expended too much effort—and venom also—on criticism thereof. *Workers' Rights and the Introduction of*

Machinery in the Men's Clothing Industry. The attitude of representative trade unions towards the introduction of machinery has varied in different industries; in the clothing industry it is satisfactorily provided for by way of collective bargaining.

Annals of the American Academy (Philadelphia).

SEPTEMBER, 1925. *New Values in Child Welfare.* A series of articles on matters relating to the interests of children; *e.g.* on the *Family Allowance System* by PAUL DOUGLAS and on the *Juvenile Court* (which saves offending children from the procedure of the criminal law) by KATHARINE LENROOT.

Political Science Quarterly (New York).

SEPTEMBER, 1925. *Neo-Classical Economics in Britain.* J. A. HOBSON. Among numerous objections to prevalent views it is alleged that they do not take into account the disutilities and utilities connected with production; nor the variation in the satisfaction of different persons or of the same persons at different times; that present desiredness rather than what ought to be desired is considered; that the infinitesimal doses postulated are unreal; that "welfare" cannot be adequately treated by mathematical methods. Thus when Prof. Pigou prescribes a higher minimum in a relatively rich country "one feels that he is imperilling the delicate and fragile structure of his calculus, in favour of some humanitarianism that is grit in the mathematical machine."

Review of Economic Statistics (Cambridge, Mass.).

JULY, 1925. *Statistics and Economic Theory.* WARREN M. PERSONS. Reviewing the progress of statistical science since the eighteen-eighties, making reputations by authoritative praise, Prof. Persons dwells on the use of Inverse Probabilities, on the proposition that "the distribution of *averages* will be approximately normal even though the distribution of the items composing the averages deviate considerably from normal," on correlation, especially in its application to "time-series" and periodic variation, so important in economics. The older economists had no prejudice against the use of statistics. They rightly thought that facts and figures could not alone decide an issue like that of Free Trade versus Protection. They rightly expected from statistics the verification and emendment of economic theory. *The Physical Volume of Production in the United States for* 1924. The indexes for mining and manufacture, "adjusted" in relation to normal growth, show a decline from 1923. For agriculture both adjusted and unadjusted indexes were stationary, on the whole, though not for the constituents—cereals, cotton fibre, etc.

SEPTEMBER. *The Interpretation of the Index of General Business Conditions.* W. L. CRUM.

Journal des Économistes (Paris).

JULY, 1925. *La civilisation occidentale et le danger bolchevik.* YVES GUYOT. *Le Budget britannique,* 1925–26. W. M. J. WILLIAMS. *Étude critique de la loi de l'offre et de la demande.* C. TURGEON. The abstract formula of the older economists relates to a hypo-

thetical market; yet it gives a simple *aperçu* of the facts better than would a crowd of details.

OCTOBER, 1925. *Consequences économiques du règlement des réparations et des dettes interalliées.* YVES GUYOT. *La défense juridique du franc.* ALBERT DREYFUS. Does justice require only the payment of the nominal amount of a State debt when the franc is depreciated?

Revue d'Économie Politique (Paris).

MAY–JUNE, 1925. *Les expériences monétaire récentes et la théorie quantitative.* A. AFTALION. A comparison between price-level and amount of circulation in recent years is fatal to the quantitative theory in its simplest form, that price and quantity of money vary inversely; but not so decidedly to the statement that, if Fisher's "equation of exchange" is written $\frac{MV+M'V'}{T}=P$, "the causal action pertains" to the elements which figure on the left side of this equation, not to P, the price-level. *Le retour à l'or en Grande-Bretagne d'après les banquiers anglais.* L. BAUDIN. The views of McKenna, Leaf, and other English authorities on the return to gold are examined. *Critique de l'utilité marginale.* C. TURGEON. In the matter of terminology "final" is preferred to marginal. "Marginal desirability" is not a desirable phrase. The calculation of "total utility" presents insuperable difficulties. *Les tendances sécessionistes en Canada et leurs bases économiques.* G. NESTLER-TRICOCHE. The "secession" for which there are economic motives is not to join the United States, nor to form an independent State, but to divide the Dominion, especially to constitute a separate colony out of the three Eastern maritime provinces.

JULY–AUGUST. *Les consequences de la hausse des prix au point de vue national moral et intellectual.* CHARLES GIDE. Work and saving are discouraged, the inequality of incomes is aggravated, the intellectual classes and charitable institutions suffer, Companies already rich gain by the reduction of their debts. *Les expériences monétaires récentes et la théorie du revenu.* A. AFTALION. The "income theory"—of which the symbolical expression is $R = PQ$, where R is the national income, Q is the total of Production, and P is the price level—is preferred to the quantity theory of money; the variations of income explaining the influence of the foreign exchanges, and other phenomena, better than the "external facts" of quantity of money. The doctrine is a development of Wieser's theory communicated to the Verein für Sozialpolitik, 1909. *L'Indice monétaire et la théorie de la monnaie.* FRANÇOIS DIVISIA. The relevance of the Gaussian law and the significance of interdependence between prices are among the interesting points touched. *Les rapports de l'entrepreneur et du capitaliste.* RENÉ HOFFHERR. *Critique de "l'utilité finale."* C. TURGEON. A continuation dealing with Böhm-Bawerk's errors, but not the final article on final utility.

Revue Politique et Parlementaire (Paris).

MAY, 1925. *Les valeurs de signes monétaires et leurs rapports.* LUCIEN MARCH. Additional support is given to the author's doctrine that index-numbers are not all of the same type.

L'avenir du travail. Bulletin de l'Association Internationale pour la protection légale des travailleurs (Bâle).

AUGUST. *Congrès international de Politique Sociale.* An account of the proceedings and results of the International Congress which took place at Prague, October 1924. STÉPHANE BAUER.

SEPTEMBER. The founders of the Association contribute a series of short articles on its methods; Prof. Mahaim describes the circumstances of its foundation, Miss Tuckwell the collaboration of Great Britain. In the part of the number devoted to historical documents there is reprinted part of Necker's *De l'importance des opinions religieuses*, showing the advantage of a day of rest.

Jahrbücher für Nationalökonomie und Statistik (Jena).

JULY–AUGUST. *Grundlegung der deutschen Volkswirtschaftslehre durch Franz von Baader* (1765–1841). J. SAUTER. It is claimed for the versatile genius Baader that he laid the foundations of German political economy and of a universal social science forming a bulwark against the subversive (*anstürmenden*) atomism of the West. *Einige wörte über die Theorie der Steuerüberwalzung.* TWERDOCHLEBOFF.

Archiv für Sozialwissenschaft (Tübingen).

JUNE, 1925. *Die allgemeinen Theorien vom National Character, I.* FRIEDRICH HERTZ. A survey of modern views about differences of national character. *Neuere Literatur auf dem Gebiete der Bevölkerungslehre.* PAUL MOMBERT. A review of thirteen recent publications (not all German) on the population question by a high authority on the subject.

AUGUST. *Kreditkontrolle.* DR. J. SCHUMPETER. Mr. Keynes' proposals cannot be gainsaid theoretically. But in the present distracted state of the world the gold standard is needed; the rather as the accepted system is not so very ineffectual. In the future the proposed reforms may succeed; perhaps anticipating a further extension of governmental control guided by economic science. *Der Gegenstand der reinen Gesellschaftlehre.* DR. FRITZ SANDER. *Die Pächterbewegung in Japan.* PROF. KUWATA.

Weltwirtschaftliches Archiv (Jena).

OCTOBER, 1925. *Edgeworth und die neuere Wirtschaftstheorie.* J. SCHUMPETER. Apropos of the Collected Papers published by the Royal Economic Society, Professor Schumpeter offers many wise observations on the use of mathematical reasoning, the inadequacy of utilitarian ethics, the modern treatment of economic problems by which the old rigid dogmas (*der Starre Doktrinarismus der alten Theorie*) are, he thinks, superseded.

Weltwirtschaft und Universalökonomie. DR. WALTER M. KOTSCHNIG. Referring to E. Bähler's article on *Der klassische Begriff der Weltwirtschaft* (1925). *Die methodischen Grundlagen der international vergleichenden Finanz-Statistik.* G. COHN. *Die Japanpolitik der Vereinigten Staaten in ihren Anfangen.* DR. JUSTUS HASHAGEN.

Zeitschrift für die Gesamte Staatswissenschaft (Tübingen).

1925, No. 3. *Substitutionsprinzep.* DR. KLÄRE STIER-SOMLO. A study on the law of substitution as conceived by Marshall and others. *Friedrich Hermann.* OTTO WEINBERGER. On the work of the great German economist (1795–1868).

1925, No. 4. *Max Weber als Erkenntnisskritiker der Sozialwissenschaften.* R. WILBRANDT. *Practische Arbeitsphysiologie.* PROF. DR. EDGAR ATZLER.

Zeitschrift für Volkswirtschaft und Sozialpolitik (Vienna).

BAND V. 1–3 Heft. *Neuere Ricardo-Kritik.* DR. FRANZ WEISS. *Die Währungspolitik der Vereinigten Staaten. . . .* DR. F. A. HAYEK. *Zur Neubegrundung der objectiver Wertlehre.* PROF. DR. F. OPPENHEIMER.

Schmoller's Jahrbuch (Munich).

1925. *Entwicklunsgeschichte der spanischen Wirtschaft.* PROF. FRANCISCO BERNIS. An address given to the Conference held in Bonn this year; the German original of a Spanish version mentioned among New Books in our number of last September. During the war there was a great increase in Spanish capital and in the cohesion of classes from which business men are drawn—Semites, Indians, Jesuits, nobles. Much is expected from reforms in agriculture and other branches.

Giornale degli Economisti (Rome).

JUNE. *La dinamica dei prezzi decrescenti.* G. DEL VECCHIO. *Ipotesi e finzioni nella Statistica.* E. F. DI VERCE.

JULY. *La politica di favore dei trasporti come forma di Protezionismo.* A. G. CANINA. *Le forme antiche e nuove di riduzione della proprietà privata.* G. MAJORANA.

AUGUST. *Infanticidio Abbandono d'infante e procurato aborto. . . .* G. TAGLIACARNE. An interpretation of Italian statistics relating to different forms of child murder.

SEPTEMBER. *Il mercato del lavoro della gente di mare e l'azione dei sindicati operai.* EPICARMO CORBINO. *F. Y. Edgeworth e l'Economia mathematica.* GUSTAVO DEL VECCHIO. Referring to the Collected Papers recently published under the auspices of the Royal Economic Society. *Ancora a proposito di meccanica economica.* UGO BROGLI and LUIGI AMOROSO. Last words on a controversy relating to Professor Amoroso's views.

La Riforma Soziale (Turin).

JULY–AUGUST, 1925. A theory which has some affinities to the physical conception of *quanta* is applied to monetary phenomena. *Il protezionismo siderurgico.* E. GISETTI.

Metron (Ferrara).

Vol. IV., Nos. 3, 4. 1925. *La fecondità delle Aristocrazie.* F. SAVORGNAN. Statistics of the ducal families in France and Belgium show a fecundity not less than that of other classes, a less infantile mortality. The rate of extinction is more than twice as great as that found in a former article for another aristocracy (le case mediatizzate della Germania). The Napoleonic aristocracy dies out more rapidly than that of the ancient regime. The Paper should be read with the author's studies *in pari materiâ*, Vol. III., Nos. 3, 4, 1924; Vol. III., No. 2, 1923. *A Statistical Study of India's Population.* G. FINDLAY SHIRRAS.

Scientia (Bologne).

SEPTEMBER, 1925. *La repartition des matières premières dans le monde.* A. DE TARLÉ.

OCTOBER. *The Population Capacity of the Earth.* G. H. KNIBBS. The world would soon arrive at the limit of its population if anything like the rate of increase in the East were maintained.

Annali di Economia (Milan).

Vol. I., Part II. *La Crisi del* 1905–1907. MAFFEO PANTALEONI. This is an official report mainly drawn up by Pantaleoni about the case of a Frenchman who, having failed to fulfil his contract with the Italian Government, pleaded that he had been prevented by a crisis in the iron industry. The Report embodies a substantial treatise—one of the best extant—on the symptoms and incidents of an industrial crisis.

NEW BOOKS

English.

AMBEDKAR (B. R.). The Evolution of Provincial Finance in British India. A Study in the Provincial Decentralisation of Imperial Finance. With a foreword by E. R. A. SELIGMAN. London: King. 1925. Pp. 285. 15*s*.

BELLERBY (J. B.). Monetary Stability. London: Macmillan. 1925. Pp. 174.

BENN (SIR ERNEST). The Confessions of a Capitalist. London: Hutchinson. 1925. 25*s*.

CALVERT (H.). The Size and Distribution of Agricultural Holdings in the Punjab. (Board of Economic Inquiry, Punjab.) 1925. Pp. 17. 4 annas.

[The rainfall affecting production affects the size and distribution of holdings, which are slowly diminished by the increase of population.]

CASSAN (DR. THEODOR). The Consumers' Co-operative Movement in Germany. Translated by J. F. MILLS. London: Unwin. 1925.

CASSEL (G.). Fundamental thoughts in Economics. London: Fisher Unwin. 1925. Pp. 159.

DAS RAJANI KANTA. Production in India. A Comparative Study in National Productivity. Calcutta: Visva-Bharati. Pp. 180.

DAVIES (EMIL). The Story of the London County Council. London: Labour Publishing Co. 1925. Pp. 95.

[Mr. Davies is Chairman and Leader of the London County Council Labour Party. The little book is not an official Party publication.]

DICK (E.). The Interest Standard of Currency. London: Allen and Unwin. Pp. 286.

DOBB (MAURICE). Capitalist Enterprise and Social Progress. London: Routledge. 1925. Pp. 409.

FAY (C. R.). Co-operation at Home and Abroad. Third edition. London: King. 1925.

[The main text and the first Supplement of this well-known treatise—reviewed in the ECONOMIC JOURNAL—are unaltered in the third edition. There is added a second Supplement dealing with Agricultural Co-operation in the Canadian West.]

FLORENCE (P. SARGANT). Economics of Fatigue and Unrest. London: Allen and Unwin. 1924. Pp. 426.

GADGIL (D. R.). The Industrial Evolution of India in Recent Times. Oxford University Press. 1924. Pp. 242. Rs. 4.8.

GRAHAM (M. K.). An Essay on Gold: showing its defects as a standard of value and suggesting a substitute therefor. Dallas (Texas): Hargreaves. 1925. Pp. 198.

[There is added a translation of an article by G. Ferrero entitled "La mort de l'or."]

HEATON (H.). Modern Economic History, with special reference to Australia. Adelaide Workers' Education Association. Melbourne: Macmillan & Co. 1925. Pp. 351.

INNES (ARTHUR D.). England's Industrial Development. A historical survey of Commerce and Industry. Third edition. London: Rivingtons. 1925. Pp. 380.

JACK (D. T.). The Economics of the Gold Standard. London: P. S. King. 1925. Pp. 88. 3*s.*

JOHNES (TREVOR). Foreign Trade and Exchange. London: P. S. King. 1925. Pp. 205.

[The author is Professor of Commerce in the Tokyo University of Commerce. He aims at summarising changes in the theory and practice of foreign trade that have occurred within the last ten years.]

KEYNES (J. M.). The Economic Consequences of Mr. Churchill. London: Hogarth Press. 1925. Pp. 32. 1*s.*

[The Government policy has secured that we receive 10 per cent. less sterling for our exports; yet employers must pay and employees spend as much as before. The policy of the Bank of England involves the intensification of unemployment. Some palliatives are suggested.]

LEAGUE OF NATIONS. Double Taxation and Tax Evasion. Report and resolutions submitted by the technical experts to the Financial Committee.

[The Committee have profited by the results of the investigations carried out by the Special Committee of four economists, whose report was noticed in the ECONOMIC JOURNAL, 1923.]

MILLER (HUGH F. H.). The Foreign Exchange Market. A practical treatise on post-war foreign exchange. London: Arnold. 1925. Pp. 152.

MORELAND (W. H.) and GEYL (P.). Jahangir's India: the Remonstrantie of Francisco Pelsaert. Translated from the Dutch by W. H. M. and P. G. Cambridge: Heffer. 1925. Pp. 88. 8*s.* 6*d.*

[The Report, which sums up the experiences of a Dutch official in Agra, was written in 1626.]

MUKERJEE (R.). Borderland of Economics. London: Allen and Unwin. 1925. Pp. 280. 12*s.* 6*d.*

[The relations of economics to other sciences, psychology, biology and even physics, are considered.]

MUKERJEE (R.). Groundwork of Economics. London: Longmans. 1925. Pp. 217.

PEEL (HON. GEORGE). The Financial Crisis of France. London: Macmillan. 1925. Pp. 323. 10*s*. 6*d*.

RAMARYA (A.). A National System of Taxation: being a study of the theory of taxation in relation to national welfare, with some applications to British India. Madura: Yyer. 1924. Pp. 252.

Rural Policy. A national rural policy. Prepared by a special Committee on Rural Reconstruction. London: Douglas. 1925. Pp. 71. 2*s*. 6*d*.

SAEK (PROFESSOR A. N.). Fixing the Value of Money. Riga: Latvian Economist, 1925. Pp. 50.

[The author is financial adviser to the Esthonian Government.]

SASTRY (K. R. R.). South Indian Gilds. Madras: Indian Publishing House. 1925. Pp. 48.

[A first-hand investigation of facts, coupled with suggestions for the improvement of an important institution. There is prefixed a letter to the author from the late Dr. Marshall, who expresses himself as "deeply interested in the fact that the term 'gild' is appropriate for use in describing some forms of Indian caste."]

SILVERMAN (H. A.). The Economics of Social Problems. London: Clive. 1925. Pp. 426. 5*s*. 6*d*.

[The author is lecturer on Economics to the University of Birmingham.]

SINGH (SARDAR B.) and CALVERT (H.). An Inquiry into Mortgages of Agricultural Land. (Board of Economic Inquiry, Punjab.) Lahore: Smedley. 1925. Pp. 30.

[Sonless proprietors are responsible for nearly half the mortgages.]

Soviet Russia. An investigation by Women Trade Unionists. London: Coates. 1925. 1*s*. net.

SPALDING (W. F.). A Primer of Exchange. Fourth impression. Second edition. London: Pitman. 1925. Pp. 113. 3*s*. 6*d*.

[The author has profited by the numerous letters which he has received relating to earlier versions.]

STARR (MARK). A Worker looks at Economics. London: Labour Publishing Co. 1925. Pp. 96. 2*s*. 6*d*.

[This little book purports to be a readable treatment of the main conclusions of Marxian economics in relation to practical problems.]

SWAIN (A. H.). Commercial Credit Risks, Export Credits and Credit Insurance. London: Pitman. 1925. Pp. 143.

THOMAS (DOROTHY SWAINE). Social Aspects of the Business Cycle. London: Routledge. 1925. Pp. 217. 10*s*. 6*d*.

[The connection of business cycles with births, deaths, marriages, suicides and other social phenomena are investigated by refined statistical methods.]

THOULESS (R. H.). Social Psychology: a text-book for students of economics. London: Clive. 1925. Pp. 376.

Unemployment Insurance in Great Britain. By the authors of "The third Winter of Unemployment." London: Macmillan. 1925. Pp. 67. 1*s*.

VOGEL (JULIUS). Unemployment, its Causes and Cure. London: Chapman. 1925. Pp. 192.

WATERS (CHARLOTTE M.). An Economic History of England, 1066–1874. Oxford University Press. 1925. Pp. 610.

WELLS (GABRIEL). The Inwardness of Unemployment. London: Matthews. 1925. Pp. 12.

[Work should be given to the men and doles to the women.]

WHEELER-BENNETT (J. W.). Information on the Reduction of Armaments. London: Allen and Unwin. 1925. Pp. 216. 10*s.*

[This compilation enables us to see what has been accomplished for the reduction of armaments during the last six years. Major-General Sir Neil Malcolm contributes an introduction, pointing out that disarmament of itself avails little unless we can devise some better moral code for the relations between different races.]

YOUNG (ARTHUR). A Tour in Ireland. Selected and edited by CONSTANTIA MAXWELL. Cambridge University Press. 1925. Pp. 244. 7*s.* 6*d.*

[The editor is Lecturer in Modern History in Trinity College, Dublin.]

American.

BARNES (HARRY ELSNER). The New History and the Social Studies. New York: Century Co. 1925. Pp. 605.

BOTTOMLEY (SAMUEL). The Gold Standard in Relation to Business, Labour and World Peace. Rhode Island: Martian Publishing Co. Pp. 94. $1.

[The plan of the American Society called Martians provides the first perfect money in history. "Government being permanently provided with a never-ending supply of money," may abolish all taxation, and so on.]

CARVER (T. N.). The Economy of Human Energy. New York: Macmillan Co. 1924. Pp. 281.

CLARK (FRED E.). Principles of Marketing. New York: Macmillan Co. 1925. Pp. 570.

CLARK (HORACE F.) and CHASE (FRANK A.). Elements of the Modern Building and Loan Associations. New York: Macmillan Co. 1925.

CRUM (W. L.) and PATTON (A. C.). Economic Statistics. Chicago: Shaw. 1925. Pp. 493.

DORIZAS. The Foreign Trade of Greece. Philadelphia. 1925.

[A doctoral thesis. The economics and political factors controlling the trade are separately treated.]

DOUGLAS (DR. DOROTHY WOLFF). Guillaume De Greef. The Social theory of an early Syndicalist. New York: Columbia University (London: P. S. King). 1925. Pp. 397.

[De Greef, who, born in 1842, flourished in Belgium, appears to have made several suggestions of practical or theoretical value—working men's free credit institutions, occupational representation, etc.]

EAVES (LUCILE). (Editor for a group of Investigators and Social Workers.) Aged Clients of Boston Social Agencies. Boston: Women's Educational and Industrial Union. 1925. Pp. 152.

GIFFORD (WARD). Real Estate Advertising. New York: Macmillan Co. 1925. Pp. 188.

HAMILTON (WALTON H.). Current Economic Problems. A series of readings on the control of industrial development. Third edition. Chicago: University Press. 1925.

[Changes required by new developments in industry have been made in this well-known collection of "readings," now numbering 412.]

Harvard Business Reports. Vol. I. of a series. Compiled by the Graduate School of Business Administration. George F. Baker Foundation. Harvard University. Chicago: Shaw. Pp. 561. $7.50.

HEWETT (WILLIAM WALLACE). The Definition of Income and its Application to Federal Taxation. Philadelphia: Westbrook. 1925. Pp. 91.

[The author is Assistant Professor of Economics in the University of Pennsylvania.]

MAJOR (F. LEE). The Duties, Responsibilities and Liabilities of Bank Directors. New York. Macmillan Co. 1925. Pp. 193.

[The author has been an assistant Bank Commissioner of the State of Arkansas.]

MOULTON (HAROLD G.). The Financial Organisation of Society. Second edition. Chicago: University Press. 1925. Pp. 780.

NELSON (HERBERT N.). Administration of Real Estate Boards. New York: Macmillan Co. 1925. Pp. 255.

PECK (H. WHITEFIELD). Taxation and Welfare. New York: Macmillan Co. 1925. Pp. 205.

Railroads: Cases and Selections. New York: Macmillan Co. 1925. Pp. 882.

SCHMIDT (L. BERNARD) and ROSS (EARLE DUDLEY). Readings in the Economic History of American Literature. New York: Macmillan Co. 1925. Pp. 591.

SELIGMAN (E. R. A.). The Economic Problems of the Modern Dentist. An address before the King's County Dental Society. New York. 1924.

[Many others beside dentists may profit by Prof. Seligman's advice about spending and saving. He does not rule out the principle of charging more to those who are able to pay more; the practice of the State in taxation. Nor does he disapprove of intelligent speculation. It might at least be made a "hobby"; and he approves of hobbies.]

VAUGHAN (FLOYD L.). Economics of our Patent System. New York: Macmillan Co. 1925. Pp. 288. 10*s*. 6*d*.

WALLACE (H. A.) and SNEDECOR (G. W.). Correlation and Machine Calculators. Ames (Iowa): State College of Agriculture. 1925. Pp. 47.

[One object of this pamphlet is to present in simple untechnical language some explanation of the various correlation coefficients. The second and principal object is to set forth explicit directions for the use of the ordinary calculating machines.]

French.

GIDE (PROF. C.). La lutte contre la cherté et la co-opération. Publié par la Fédération Co-operative Presse.

HAUSER (PROF.). La nouvelle Orientation Économique. Bibliothèque des Sciences Sociales.

Aperçu de la démographie des divers pays du monde. La Hague: Stockum. 1925. Pp. 485.

[This is an immense compilation of statistics affording numerous comparisons between nations. *E.g.* the ratio of male to female births proves to be (when ratios based on too small numbers are ruled out) between 1000 and 1100 for some hundred communities. Greece (with ratio 1163) and Corea, 1127, are exceptions.]

JOUVET (ALPHONSE A.). La restauration financière de la Belgique. Paris : Giard. 1925. Pp. 216.

PIRON (GAETAN). Les doctrines économiques en France depuis 1870. Paris : Colin. 1925. Pp. 204.

ROUSIER (PAUL DE). Les grandes industries Modernes : Les industries textiles. Paris : Colin. 1925. Pp. 261. 9 fr.

SÉE (HENRI). L'évolution de la pensée politique en France au xviii^e siècle. Paris : Giard. 1925. Pp. 398.

VERMEIL (PROF.). L'Allemagne contemporaine : Sa structure et son évolution.

WASSERMAN (MAX). L'Œuvre de la Fédéral Trade Commission. Étude sur la législation contre le Trusts en Amérique.

The following volumes have been issued by the Carnegie Endowment under the auspices of their French Committee :—

L'industrie français pendant la guerre. By ARTHUR FONTAIN, Président du Bureau International de Travail.

L'agriculture en France pendant la guerre. By A. LARIBÉ.

Les forces hydroélectriques pendant la guerre. By M. BLANCHARD.

Les industries textiles. By PROF. AFTALION.

Le controle du ravitaillement de la population civile par les pouvoirs publics. By M. PINOT.

Le problème du régionalisme. By M. HAUSER, Professor at the Sorbonne.

Lyon pendant la guerre. By M. HERRIOT, Président de la Chambre des Députés.

Bordeaux pendant la guerre. By PROF. COURTEAULT.

Bibliographie de la Guerre. By CAMILLE BLOCH, directeur du Musée de la Guerre.

All these volumes are published by La librarie des Presses Universitaires, 49 boulevard St. Michel, Paris.

M. Fontain's volume will appear shortly in an English translation, and other translations will follow.

German.

BRENTANO (LUGO). Agrar-politik. Zweite neubearbeitetete und vermehrte Auflage. Stuttgart, Berlin. 1925. Pp. 294.

[The first edition appeared in 1896.]

EGNER (DR. ERICH). Der lateinische Münzbund seit dem Weltkriege. Leipsic. Akademische Verlagsgesellschaft. 1925. Pp. 108.

FISHER (IRVING). Moral bei Geld ausgabe und beim Gedrückzuge durch unsere Nationalen Noten-banken. Bern : Pestalozzi. 1925. Pp. 30.

HALBERSTAEDTER (HERMANN). Die Problematik des wirtschaftlichen Prinzeps. Berlin, Leipsic : Gruyter. 1925. Pp. 90.

HEBERLE (DR. RUDOLF). Zur Geschichte der Arbeiterbewegung in Schweden. Jena : Fischer. 1925.

KULISCHER (DR. JOSEF). Russische Wirtschaftgeschichte. Erster Band. Jena : Fischer. 1925. Pp. 452.

LIEFMANN (ROBERT). Vom Reichtum der Nationen. Karlsruhe : Braun. 1925. Pp 143.

Nachschlagebuch der Nachschlagewerke. Hamburg: Wirtschaftsdienst. 1925. Pp. 31.

[This is a guide to reference books and directories relating to economics in different parts of the world.]

NOTZ (DR. EMIL). Die Säkulare Entwicklung der Kaufkraft des Geldes. Jena: Fischer. 1925. Pp. 283.

Italian.

BOLDRINI (MARCELLO). Sviluppo Corporeo e Predispozioni Morbose. (Pubblicazioni dell' Università Cattolica del Sacro Cuore.) Milan: "Vita e Pensiero." 1925. Pp. 234.

[A study on the relation between measurable attributes and health. *E.g.* the mean height of healthy men is notably shorter than that of those who suffer from constitutional diseases.]

CARLI (FILIPPO). La Teoriè Sociologiche. Padova: A. Milani. 1925. Pp. 202.

[A comprehensive analysis and criticism of systems many of which concern the economist; *e.g.* those of Cournot and Pareto.]

EINAUDI (LUIGI). La terra e l'imposta. Milan. 1925. Pp. 169. Extracted from the *Annali di Economia.*

FERRI (C. E.). Lineamenti di una teoria delle *elites* in economia. Milan: Istituti editorale scambio.

GRAZIANI (AUGUSTO). Istituzioni di economia politica. Quarta edizione, interamente riveduta. Turin: Bocca. 1925. Pp. 803.

[A fourth edition of the work reviewed in the ECONOMIC JOURNAL, Vol. XIV.]

GRIZIOTTI (BENVENUTO). La politica finanziaria Italiana. Studi sui problemi Monetari e finanziari. Milan: Istituto editoriale. 1926. Pp. 225.

LOGGIA (E.). Il problema demographico. Milan: Alpe.

MICHELS (R.). L'organizzazione del commercio estero. Bologna: Zanichelli.

NAVARRA-CRIMI. Problemi dell' economia Siciliana. Turin: Lattes.

SUPINO (CAMILLO). Le basi economiche del movimento operaio. Milan: Alberighi.